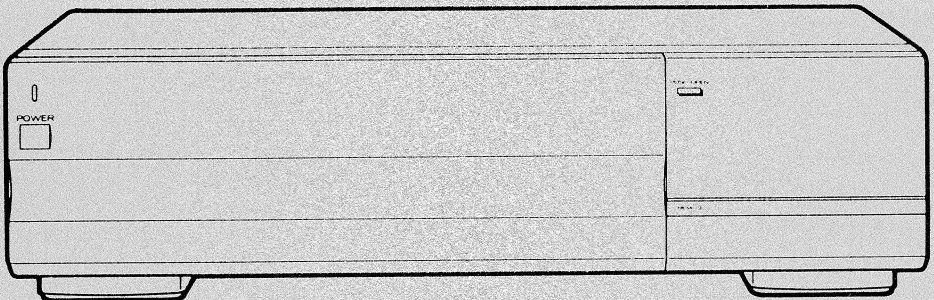
SERV. 9515

**MITSUBISHI**

1990

# Service Manual

VIDEO CASSETTE RECORDER



S-VHS
VHS

HS-B82 MODEL
HS - E82
HS - E82 (Y)
HS - E82 (IR)
HS - E82 (NZ)

Only cassettes marked S-VHS or VHS can be used with this video cassette recorder.

## SPECIFICATION

**Tape Format** :S-VHS/VHS 1/2" high-density video cassette tape
**Power source** :220V AC;50Hz[Except NZ]
230V AC;50Hz[NZ]
**Power consumption** :Approx. 50W
**Television System** :PAL colour and CCIR monochrome signal(System I)625lines 50fields
**Video recording system** :4 rotary heads, azimuth helical scanning system
**Audio recording system**
**Hi-Fi stereo** :2 rotary heads, azimuth helical scanning system
Frequency modulation, deep layer recording
**Linear Audio** :1 stationary head, 1 track(mono)
**Tape speed** :23.39mm/sec(SP)
11.70mm/sec(LP)
**Record/playback time** :240 min. with E-240 cassette(SP)
480 min. with E-240 cassette(LP)
**Fast forward/Rewind time** :Approx. 2 min. with E-240 cassette
**Heads: Video** :4 rotary single ferrite heads
**Hi-Fi Audio** :2 rotary single ferrite heads
**Audio/Control** :1 stationary head
**Erase** :1 full track head + flying erase
**Video input** :0.5 to 2.0Vp-p/75Ω unbalanced AUX VIDEO socket and EURO AV socket
**Audio input: Line** :-8 dBs/50kΩ unbalanced AUX AUDIO socket and EURO AV socket
**Video output** :1.0Vp-p/75Ω unbalanced VIDEO OUT socket and EURO AV socket
**Audio output** :-6 dBs/1kΩ unbalanced AUDIO OUT socket and EURO AV socket
**Note**:EURO AV socket Except NZ
**Luminance Input/Output** :1.0Vp-p/75Ω (S Terminal)
**Chroma Input/Output** :0.3Vp-p/75Ω Burst Signal (S Terminal)
**TV Tuner** :VHF E2~E12CH[E, Y]
A~J CH[IR]
1~11CH[NZ]
UHF 21~69CH
CATV S1'~S3'CH[E, Y]
S1~S20CH[Y]
S1~S41CH[E]
**Operating Temperature** :5°C to 40°C
**RF Channel output** :Set to Channel 36CH[E, Y]
Set to Channel 38CH[IR]
Set to Channel 3CH[NZ]
Channel 32~40 Selectable [Except NZ]
**Weight** :Approx. 9.0kg
**Dimensions** :425mm(W) × 120mm(H) × 407mm(D)
**Timer** :8 programs for any channels in one month/every week/Monday to Friday 12 hour digital synchronized with integrated quartz oscillator frequency.
**Channel Selection** :99 position UP/DOWN+EXT (voltage synthesizer selector)
**Deck** :F Deck

- Weight and dimensions shown are approximate.
- Design and specifications are subject to change without notice.

**MITSUBISHI ELECTRIC CORPORATION**

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**Circuit Diagrams**

# DISASSEMBLY

## 1. Removal of Top Cover

A. Remove the four screws (ⓐ~ⓓ) retaining the Top Cover, as shown in Fig.1.

B. Gently expand the bottom edges of the Top Cover, then slide toward rear in the direction of the arrows.

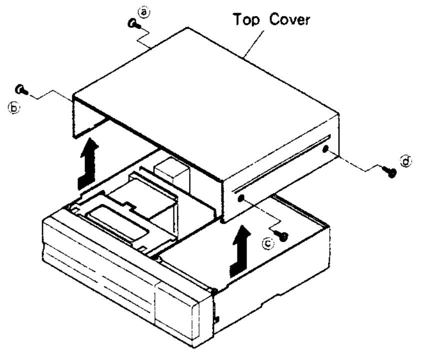


Fig.1

## 2. Removal of Bottom Cover

A. Remove the ten screws (ⓐ~ⓙ) retaining the Bottom Cover, as shown in Fig.2.

B. Remove the Bottom Cover.

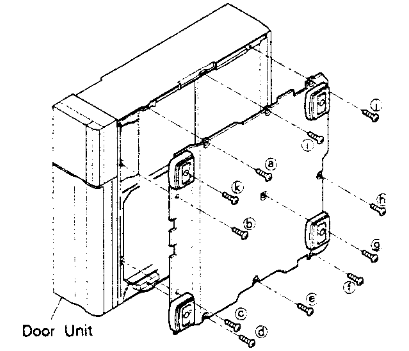


Fig.2

## 3. Removal of Front Panel

A. Remove the Top Cover. (Item 1)

B. Remove the screw (ⓚ) retaining the front insulator as shown in Fig.2.

C. Open the Door Unit.

D. Unfasten the six snaps (ⓐ~ⓕ) as shown in Fig.3.

E. Remove the Front Panel.

**Note** :

To install the Front Panel, move the SLIDE RESISTOR of PCB TIMER and the knob of the REC LEVEL of Front Panel to left or right side.

## 4. Removal of Door Unit

A. Remove the Front Panel (Item 3).

B. Remove the six screws (ⓖ~ⓛ) retaining the ground lead , the door holder and the damper unit, as shown in Fig.3.

C. Disconnect the flat cable by gentle lifting the covers of the connector MA , MC .

D. Remove the Door Unit.

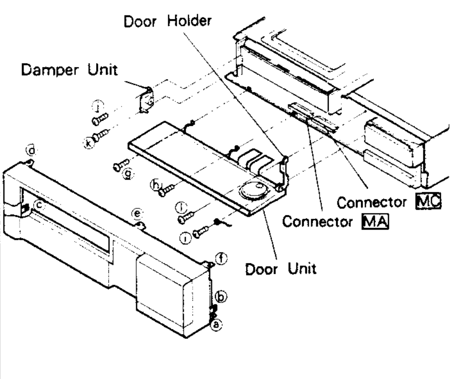
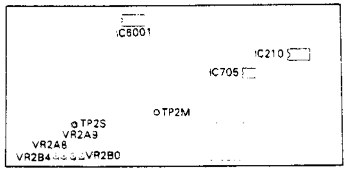
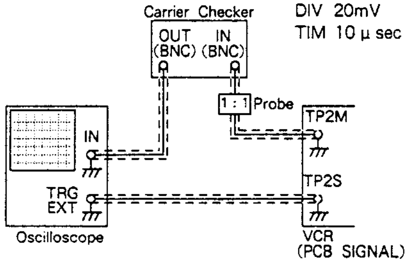


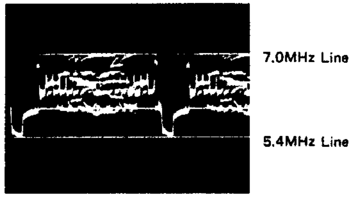
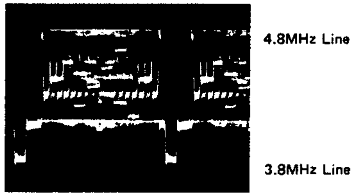
Fig.3

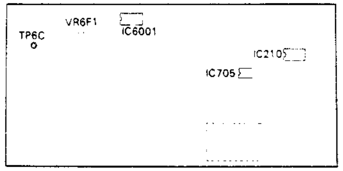
<table>
<tr><th>No.</th><th>ITEM</th><th>MODE</th><th>ADJ. METHOD</th><th>ADJUSTMENT PROCEDURE</th></tr>
<tr>
<td>10</td>
<td>FM Carrier<br>PCB SIGNAL (COMPONENT SIDE)<br>

IC6001
IC210
IC705
TP2M
TP2S
VR2A9
VR2A8
VR2B4
VR2B0

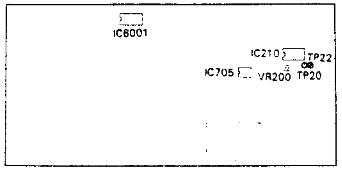
</td>
<td>Supply VIDEO signal<br>(G card)<br>STOP mode<br>S-VHS SW to ON<br><br>S-VHS SW to OFF</td>
<td>●Oscilloscope to TP2M(SIGNAL) via the carrier checker<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR2B0(SIGNAL)<br>●VR2A9(SIGNAL)<br>●VR2B4(SIGNAL)<br>●VR2A8(SIGNAL)<br><br>DIV 50mV<br>TIM 10µsec<br>(10:1)<br><br>

Carrier Checker
OUT
IN
(BNC)
(BNC)
1 : 1
Probe
TP2M
TP2S
VCR
(PCB SIGNAL)
IN
TRG
EXT
Oscilloscope

<br>DIV 20mV<br>TIM 10µsec</td>
<td>1. Adjust VR2B0(FM CAR SET) and VR2A9(FM DEV SET) so that the response waveform 5.4MHz(sync-tip) line and 7.0MHz (deviation) just touch each of the white lines on the oscilloscope.<br><br>2. Adjust VR2B4(FM CAR SET) and VR2A8(FM DEV SET) so that the response waveform 3.8MHz(sync-tip) line and 4.8MHz (deviation) just touch each of the white lines on the oscilloscope.<br><br>
<table>
<tr><th></th><th>S-VHS mode</th><th>Normal VHS mode</th></tr>
<tr><td>Deviation line (A)</td><td>7.0MHz</td><td>4.8MHz</td></tr>
<tr><td>Sync－tip line (B)</td><td>5.4MHz</td><td>3.8MHz</td></tr>
</table>
<br>S-VHS<br> <br>Normal VHS<br> </td>
</tr>
</table>

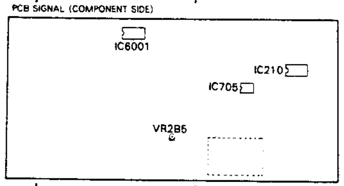
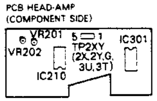
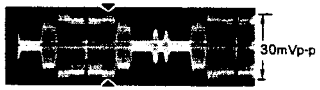
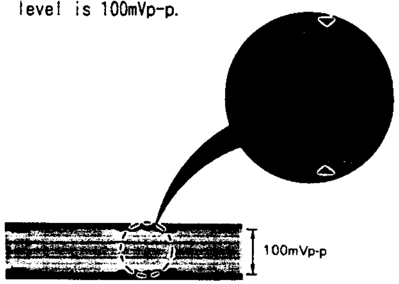
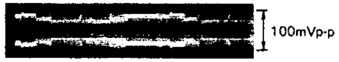
<table>
<tr><th>No.</th><th>ITEM</th><th>MODE</th><th>ADJ. METHOD</th><th>ADJUSTMENT PROCEDURE</th></tr>
<tr>
<td>11</td>
<td>Chroma AFC<br>PCB SIGNAL (COMPONENT SIDE)<br>

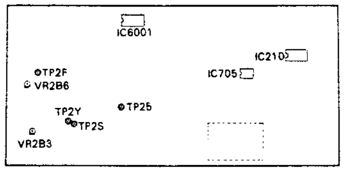
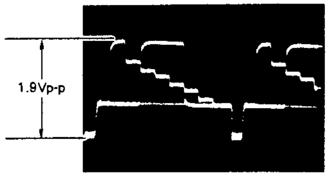
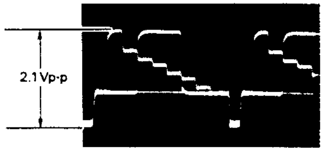
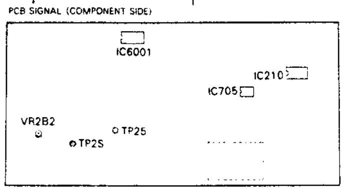
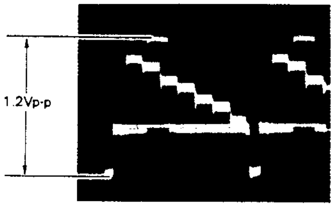
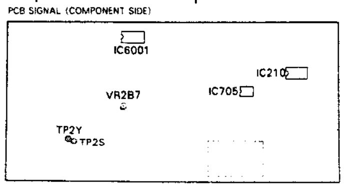
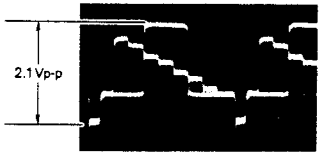
VR6F1
IC6001
TP6C
IC210
IC705

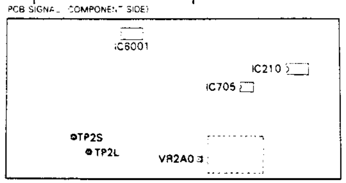
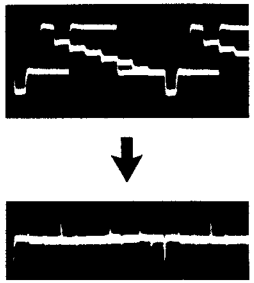
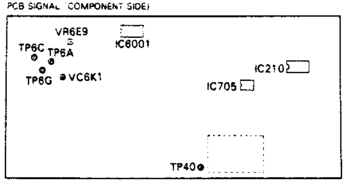
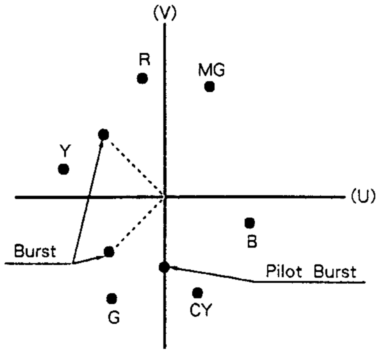
</td>
<td>EXT mode<br>REC mode<br><br>Don't supply VIDEO signal</td>
<td>●Frequency counter to TP6C (SIGNAL)<br>●VR6F1(SIGNAL)</td>
<td>1. Short circuit TP20(SIGNAL PCB) and TP2B (SIGNAL PCB).<br>2. Adjust VR6F1 so that the frequency is 5056.6±2.0kHz.</td>
</tr>
<tr>
<td>12</td>
<td>List 2<br>PCB SIGNAL (COMPONENT SIDE)<br>

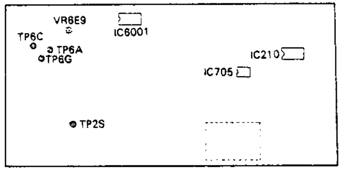
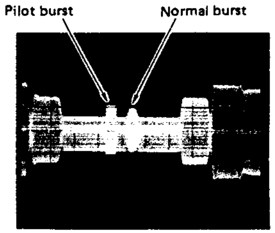
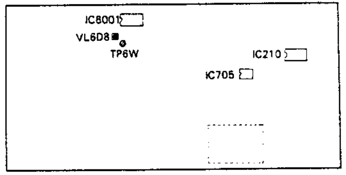
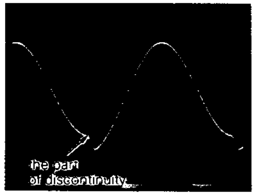
IC6001
IC210
TP22
IC705
VR200
TP20

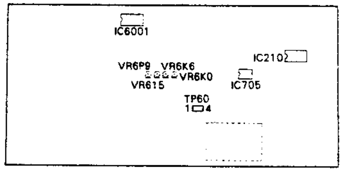
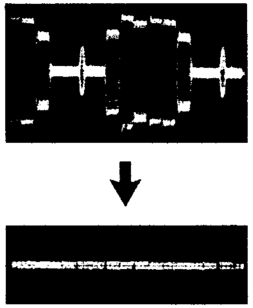
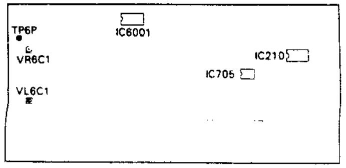
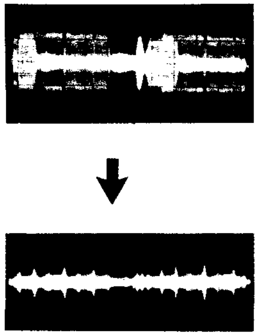
</td>
<td>EXT mode<br>STOP mode<br><br>Don't supply VIDEO signal</td>
<td>●Frequency counter to TP20 (SIGNAL)<br>●VR200(SIGNAL)</td>
<td>1. Set the VIDEO MUTE SW to OFF.<br>2. Connect TP22(SIGNAL PCB) to GND.<br>3. Adjust VR200 so that the frequency is 15.725±0.01kHz.</td>
</tr>
</table>

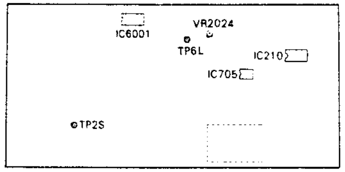
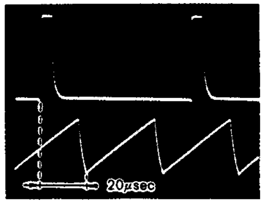
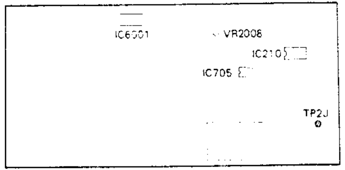
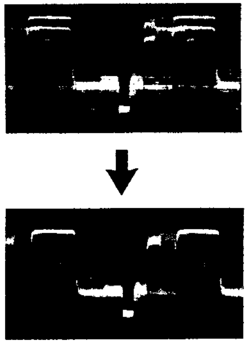
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 13 | Y/C REC Level<br><br> PCB SIGNAL (COMPONENT SIDE)<br>IC6001<br>IC210<br>IC705<br>VR2B5<br><br> PCB HEAD-AMP (COMPONENT SIDE)<br>VR201<br>VR202<br>5 1<br>TP2XY (2X,2Y,G, 3U,3T)<br>IC301<br>IC210 | Supply RF signal (Colour bar)<br>LP REC mode<br>S-VHS SW to ON | ●Oscilloscope to TP2XY connector pin ④(HEAD-AMP)<br>●Oscilloscope's GND to TP2XY connector pin ⑤ (HEAD-AMP)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR201(HEAD-AMP)<br>DIV 10mV<br>TIM 10μsec<br>(1:1)<br>●VR202(HEAD-AMP)<br>DIV 5mV<br>TIM 10μsec<br>(10:1) | 1. Short circuit TP2D(SIGNAL PCB) and TP2B (SIGNAL PCB).<br>2. Adjust VR201 so that the magenta level is 30mVp-p.<br><br> <br>3. Open circuit TP2D and TP2B.<br>4. Adjust VR202 so that the luminance FM level is 100mVp-p.<br><br> |
|  |  | S-VHS SW to OFF | ●VR2B5(SIGNAL)<br>DIV 5mV<br>TIM 10μsec<br>(10:1) | 5. Adjust VR2B5 so that the luminance FM level is 100mVp-p.<br><br> |

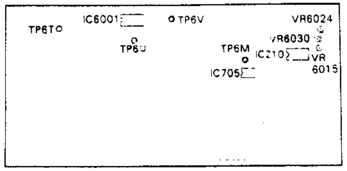
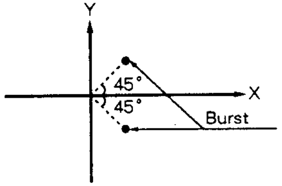
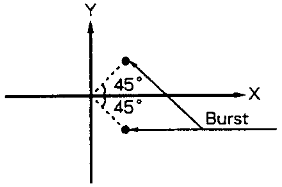
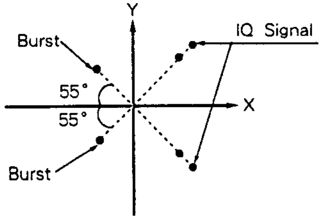
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 14 | Demodulation Sensitivity (Normal VHS)/ Playback Luminance Level (Normal VHS)<br><br> PCB SIGNAL (COMPONENT SIDE)<br>IC6001<br>IC210<br>IC705<br>TP2F<br>VR2B6<br>TP25<br>TP2Y<br>TP2S<br>VR2B3 | Playback Alignment tape (Colour bar) | ●Oscilloscope to TP2Y(SIGNAL)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR2B3(SIGNAL)<br>DIV 50mV<br>TIM 10μsec<br>(10:1)<br>●VR2B6(SIGNAL)<br>DIV 50mV<br>TIM 10μsec<br>(10:1) | 1. Short circuit TP2F(SIGNAL PCB) and TP2B (SIGNAL PCB).<br>2. Adjust VR2B3 so that the level is 1.9Vp-p.<br><br> <br>3. Open circuit TP2F and TP2B.<br>4. Adjust VR2B6 so that the level is 2.1Vp-p.<br><br> |
| 15 | Demodulation Sensitivity (S-VHS)<br><br> PCB SIGNAL (COMPONENT SIDE)<br>IC6001<br>IC210<br>IC705<br>VR2B2<br>TP25<br>TP2S | Playback S-VHS Alignment tape (PC(S)) | ●Oscilloscope to TP25(SIGNAL)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR2B2(SIGNAL)<br>DIV 20mV<br>TIM 10μsec<br>(10:1) | 1. Adjust VR2B2 so that the level is 1.2Vp-p.<br><br> |
| 16 | Playback Luminance Level (S-VHS)<br><br> PCB SIGNAL (COMPONENT SIDE)<br>IC6001<br>IC210<br>IC705<br>VR2B7<br>TP2Y<br>TP2S | Playback S-VHS Alignment tape (PC(S)) | ●Oscilloscope to TP2Y(SIGNAL)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR2B7(SIGNAL)<br>DIV 50mV<br>TIM 10μsec<br>(10:1) | 1. Adjust VR2B7 so that the level is 2.1Vp-p.<br><br> |

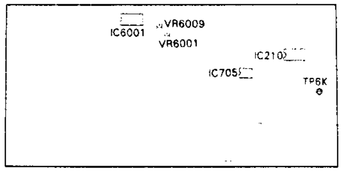
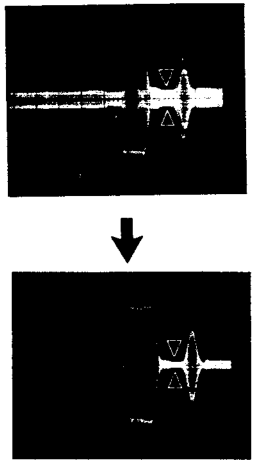
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 17 | Noise Cancel(Y)<br>PCB SIGNAL (COMPONENT SIDE)<br> IC6001<br>IC210<br>IC705<br>TP2S<br>TP2L<br>VR2A0 | Playback<br>Alignment tape<br>(Colour bar) | ●Oscilloscope to TP2L(SIGNAL)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR2A0(SIGNAL)<br><br>DIV 5mV<br>TIM 10µsec<br>(10:1) | 1. Adjust VR2A0 so that the video signal level is minimum.<br><br>Note:The amplitude of video signal must be below 30mVp-p.<br>(Except spike part)<br> |
| 18 | Pilot Burst<br>Phase<br>PCB SIGNAL (COMPONENT SIDE)<br> VR6E9<br>TP6C<br>TP6A<br>IC6001<br>TP6G<br>VC6K1<br>IC210<br>IC705<br>TP40 | Supply VIDEO signal<br>(Colour bar)<br>SP mode<br>STOP mode<br>S-VHS SW to ON | ●Vector scope to TP6A(SIGNAL)<br>●VC6K1(SIGNAL)<br><br>●VR6E9(SIGNAL) | 1. Short circuit TP6C(SIGNAL PCB) and TP6G (SIGNAL PCB).<br>2. Connect the EXT φREF terminal of vector scope to TP40(SIGNAL PCB).<br>3. Locate the burst to the fixed position, and adjust VC6K1 so that the pilot burst located 270° from U-axis.<br>4. Adjust VR6E9 so that the pilot burst level is about 1.1 times the burst level.<br>5. Alternate adjustments of step 3 and step 4.<br> (V)<br>R<br>MG<br>Y<br>(U)<br>B<br>Burst<br>Pilot Burst<br>G<br>CY |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 19 | Pilot Burst<br>Level<br>PCB SIGNAL (COMPONENT SIDE)<br> VR6E9<br>IC6001<br>TP6C<br>TP6A<br>TP6G<br>IC210<br>IC705<br>TP2S | Supply VIDEO signal<br>(Colour bar)<br>STOP mode<br>S-VHS SW to ON | ●Oscilloscope to TP6A(SIGNAL)<br>●Oscilloscope's GND to TP6G (SIGNAL)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VR6E9(SIGNAL)<br><br>DIV 5mV<br>TIM 5µsec<br>(10:1) | 1. Short circuit TP6C(SIGNAL PCB) and TP6G (SIGNAL PCB).<br>2. Adjust VR6E9 so that the pilot burst amplitude is 1.1 times the burst signal in S-VHS mode(S803:ON).<br>3. Check that the pilot burst signal disappears in Normal VHS mode (S803:OFF)<br> Pilot burst<br>Normal burst |
| 20 | SECAM Detector<br><br>*This adjustment has application to HS-E82, HS-E82 (Y), HS-E82(G).<br>PCB SIGNAL (COMPONENT SIDE)<br> IC6001<br>VL6D8<br>TP6W<br>IC210<br>IC705 | Supply RF Signal<br>(SECAM Colour bar)<br>STOP mode | ●Oscilloscope to TP6W(SIGNAL)<br>●VL6D8(SIGNAL)<br><br>DIV 0.1V<br>TIM 20µsec<br>(10:1) | 1. Adjust VL6D8 so that the amplitude waveform (fH/2) at TP6W is maximum.<br> the part<br>of discontinuity |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 21 | Chroma-COMB<br>PCB SIGNAL (COMPONENT SIDE)<br><br> IC6001<br>IC210<br>VR6P9<br>VR6K6<br>VR6K0<br>VR615<br>IC705<br>TP60<br>1<br>4 | Supply video signal<br>(Colour bar)<br>STOP mode | ●Oscilloscope's CH-1 to TP60 connector pin ① (SIGNAL)<br>●Oscilloscope's CH-2 to TP60 connector pin ② (SIGNAL)<br>●Oscilloscope's GND to TP60 connector pin ④ (SIGNAL)<br>●Oscilloscope's CH-2 to Invert mode<br>●Oscilloscope to ADD mode<br>●Oscilloscope's CH-2 to TP60 connector pin ③ (SIGNAL)<br>●VR6P9(SIGNAL)<br>●VR6J5(SIGNAL)<br>●VR6K0(SIGNAL)<br>●VR6K6(SIGNAL)<br>Note:<br>CH-1 and CH-2 input attenuator must be matched.<br>DIV 50mV<br>TIM 10μsec<br>(10:1) | 1. Alternate adjustments in the following sequence: VR6P9, VR6J5 so that the chroma level is minimum.<br>2. Check that the minimum chroma level is less than 30mVp-p.<br><br>3. Alternate adjustments in the following sequence: VR6K0, VR6K6 so that the chroma level is minimum. |
| 22 | Chroma Noise Reduction<br>PCB SIGNAL (COMPONENT SIDE)<br><br> | Playback Alignment tape<br>(Colour bar) | ●Oscilloscope to TP6P(SIGNAL)<br>●Oscilloscope's EXT trigger to TP2S(SIGNAL)<br>●VL6C1(SIGNAL)<br>●VR6C1(SIGNAL)<br>DIV 50mV<br>TIM 10μsec<br>(10:1) | 1. Alternate adjustments in the following sequence: VL6C1 and VR6C1 so that the magenta level is minimum.<br>2. Check that the magenta level is less than 30mVp-p.<br> |

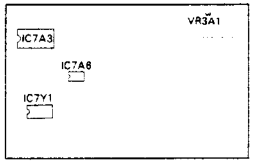
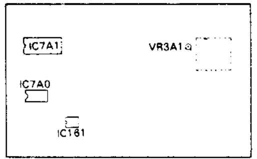
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 23 | VCO of LP-SS Circuit<br>PCB SIGNAL (COMPONENT SIDE)<br><br> | STOP mode | ●Oscilloscope's CH-1 to TP2S (SIGNAL)<br>●Oscilloscope's CH-2 to TP6L (SIGNAL)<br>●Set the TRIG. SOURCE SW to CH-1<br>●VR2024(SIGNAL)<br>DIV 0.2V<br>TIM 5msec<br>(10:1) | 1. Check that the frequency of waveform at CH-2 is approximately 2 times as many as that at CH-1.<br>2. Adjust VR2024 so that the time between the rising edge of CH-1 and bottom edge of CH-2 is 20μsec.<br><br> |
| 24 | Luminance Output Level of LP-SS Circuit<br>PCB SIGNAL (COMPONENT SIDE)<br><br> | Playback a self recorded LP tape<br>(VHS Colour bar, Speed Search mode). | ●Oscilloscope to TP2J(SIGNAL)<br>●VR2008(SIGNAL)<br>DIV 50mV<br>TIM 10μsec<br>(10:1) | 1. Adjust VR2008 so that the amplitude of the two luminance waveforms on the oscilloscope's display coincide.<br> |

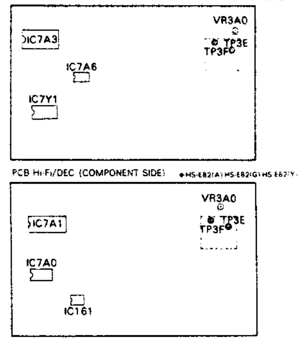
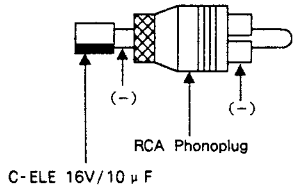
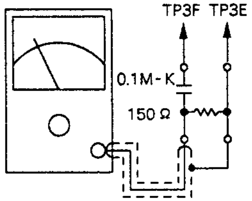
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 25 | U-Axis and<br>V-Axis of CAI<br>PCB SIGNAL (COMPONENT SIDE)<br> TP6T<br>IC6001<br>TP6V<br>VR6024<br>VR6030<br>TP6U<br>TP6M<br>IC210<br>VR 6015<br>IC705 | Playback a self recorded LP tape<br>(Colour bar)<br>Still mode | ●Oscilloscope's CH-1 to TP6U (SIGNAL)<br>●Oscilloscope's CH-2 to TP6V (SIGNAL)<br>●Oscilloscope to X-Y mode<br>●VR6030(SIGNAL)<br>DIV 10mV<br>(10:1) | [LP-SS VHS]<br>1. Adjust VR6030 so that the burst is located at ±45° from the X-axis and the two bright-point of each colour coincide.<br> Y<br>X<br>45°<br>45°<br>Burst |
| | | Playback a self recorded LP tape<br>(Colour bar)<br>Still mode<br>S-VHS SW to ON | ●VR6024(SIGNAL)<br>DIV 10mV<br>(10:1) | [LP-SS S-VHS]<br>1. Adjust VR6024 so that the burst is located at ±45° from the X-axis and the two bright-point of each colour coincide.<br> Y<br>X<br>45°<br>45°<br>Burst |
| | | Playback NTSC Alignment tape<br>(Colour bar) | ●VR6015(SIGNAL)<br>DIV 10mV<br>(10:1) | [NTSC-PB]<br>1. Adjust VR6015 so that the burst is located at +55° from the minus X-axis.<br> Y<br>IQ Signal<br>Burst<br>55°<br>55°<br>X<br>Burst |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 26 | CAI Carrier Offset<br>PCB SIGNAL (COMPONENT SIDE)<br> IC6001<br>VR6009<br>VR6001<br>IC210<br>IC705<br>TP6K | Playback self recorded SP tape<br>(Colour bar)<br>S-VHS SW to ON | ●Oscilloscope to TP6K(SIGNAL)<br>●VR6009(SIGNAL)<br>●VR6001(SIGNAL)<br>DIV 20mV<br>TIM 5μsec<br>(10:1) | 1. Alternate adjustments in the following sequence: VR6009 and VR6001 so that the carrier leak level is minimum.<br>2. Check that the minimum carrier leak level is less than 30mVp-p.<br> |

## Audio Circuit

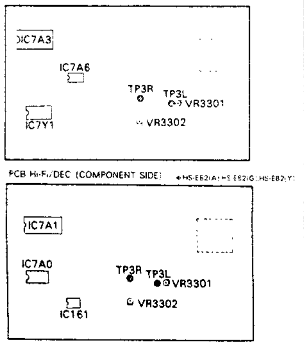
* 1. Set the MIX SW to Normal mode.
* 2. Set the AV INPUT SELECT SW to AUX mode.
* 3. Supply video signal to the AUX VIDEO socket.

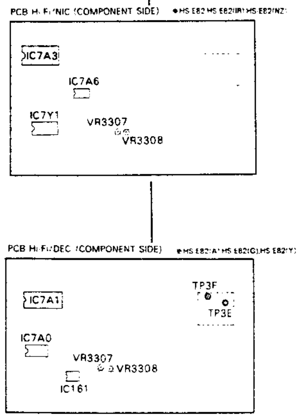
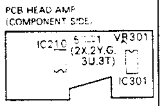
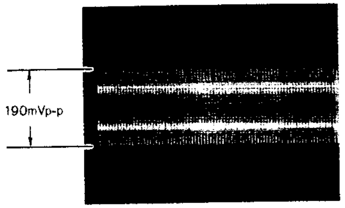
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 27 | Playback Audio Level<br>PCB Hi-Fi/NIC (COMPONENT SIDE) ●HS-E82 HS-E82(R) HS-E82(NZ)<br> VR3A1<br>IC7A3<br>IC7A6<br>IC7Y1<br>PCB Hi-Fi/DEC (COMPONENT SIDE) ●HS-E82(A) HS-E82(G) HS-E82(Y)<br> IC7A1<br>VR3A1<br>IC7A0<br>IC161 | Playback Alignment tape<br>(Colour bar, 1kHz audio) | ●AC Voltmeter to AUX Audio socket(L-CH or R-CH)<br>●VR3A1(Hi-Fi/NIC, Hi-Fi/DEC) | 1. Set the AUDIO MONITOR SW to AUDIO mode.<br>2. Adjust VR3A1 for an AUDIO OUT level of -6dBs(388mVr.m.s).<br>3. Confirm that the level fluctuation is less than ±1dBs.<br>If level fluctuation is over ±1dB then check the mechanical adjustments. |

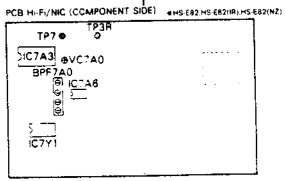
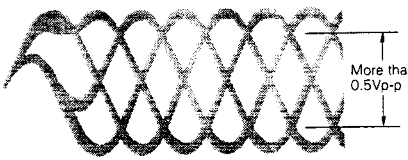
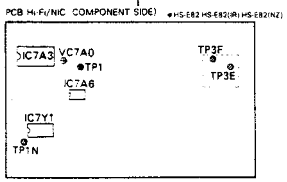
| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 28 | Audio Bias Level<br><br> PCB Hi-Fi/NIC (COMPONENT SIDE)<br>◆HS-E82,HS-E82(R),HS-E82(NZ)<br>VR3A0<br>IC7A3<br>TP3E<br>TP3F<br>IC7A6<br>IC7Y1<br>PCB Hi-Fi/DEC (COMPONENT SIDE)<br>◆HS-E82(A),HS-E82(G),HS-E82(Y)<br>VR3A0<br>IC7A1<br>TP3E<br>TP3F<br>IC7A0<br>IC161<br><br> (−)<br>(−)<br>RCA Phonoplug<br>C-ELE 16V/10μF | SP REC mode | ●AC Voltmeter to TP3E(Hi-Fi/NIC, Hi-Fi/DEC) and TP3F(Hi-Fi/NIC, Hi-Fi/DEC) through a high pass fillter.<br>Note: Be careful that the AC Voltmeter housing does not touch the VCR chassis.<br>●VR3A0(Hi-Fi/NIC, Hi-Fi/DEC) | 1. Insert a shorted RCA type Phonoplug into the AUX AUDIO socket.<br>2. Confirm that the monitor TV etc. does not affect the indication of the AC voltmeter and then adjust VR3A0 for a level of 2.6mVr.m.s.<br>Note:Do not set the VCR to PLAY mode with the AC voltmeter connected. (The audio amplifier will be over-loaded.)<br><br> TP3F TP3E<br>0.1M-K<br>150Ω |

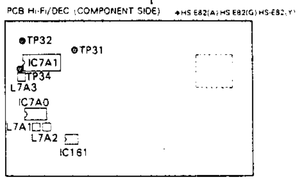
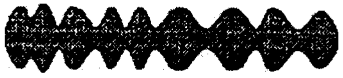
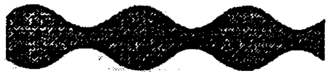
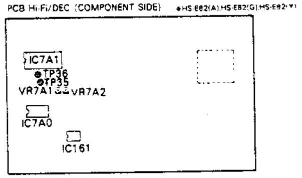
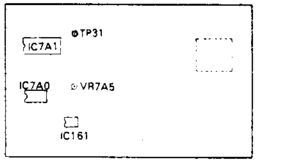
## Hi-Fi Audio Circuit

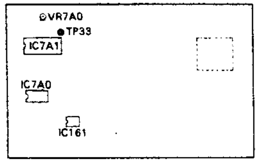
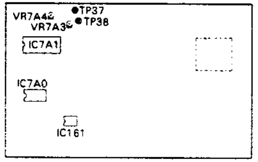
※1.Set the AUDIO MONITOR SW to Hi-Fi mode
※2.Set the AV INPUT SELECT SW to AUX mode

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 29 | OSC Frequency<br><br> PCB Hi-Fi/NIC (COMPONENT SIDE<br>◆HS-E82,HS-E82(R),HS-E82(NZ)<br>IC7A3<br>IC7A6<br>TP3R<br>TP3L<br>VR3301<br>IC7Y1<br>VR3302<br>PCB Hi-Fi/DEC (COMPONENT SIDE)<br>◆HS-E82(A),HS-E82(G),HS-E82(Y)<br>IC7A1<br>IC7A0<br>TP3R<br>TP3L<br>VR3301<br>VR3302<br>IC161 | REC mode | ●Frequency Counter to TP3L (Hi-Fi/NIC)<br>●VR3301(Hi-Fi/NIC, Hi-Fi/DEC)<br>●Frequency Counter to TP3R (Hi-Fi/NIC, Hi-Fi/DEC)<br>●VR3302(Hi-Fi/NIC, Hi-Fi/DEC) | 1. Short circuit AUX AUDIO socket(L-CH and R-CH).<br>2. Adjust VR3301 so that Frequency at TP3L is 1.4000MHz±3kHz.<br>3. Adjust VR3302 so that Frequency at TP3R is 1.8000MHz±3kHz. |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 30 | E-E Level<br><br> PCB Hi-Fi/NIC (COMPONENT SIDE)<br>◆HS-E82,HS-E82(R),HS-E82(NZ)<br>IC7A3<br>IC7A6<br>IC7Y1<br>VR3307<br>VR3308<br>PCB Hi-Fi/DEC (COMPONENT SIDE)<br>◆HS-E82(A),HS-E82(G),HS-E82(Y)<br>TP3F<br>TP3E<br>IC7A1<br>IC7A0<br>VR3307<br>VR3308<br>IC161 | Supply AUDIO signal (1kHz, -8dBs) to AUX AUDIO socket (R-CH and L-CH) | ●AC Voltmeter to AUDIO OUT socket<br>●L-CH AUDIO OUT socket<br>●VR3307(Hi-Fi/NIC, Hi-Fi/DEC)<br>●R-CH AUDIO OUT socket<br>●VR3308(Hi-Fi/NIC, Hi-Fi/DEC) | 1. Set the REC LEVEL ADJ to center click stop position.<br>2. Set the MIX SW to OFF.<br>3. Adjust VR3307 so that the audio output level at L-CH is -6dBs.<br>4. Adjust VR3308 so that the audio output level at R-CH is -6dBs. |
| 31 | FM REC Level<br><br> PCB HEAD AMP (COMPONENT SIDE)<br>IC210<br>(2X.2Y.G.<br>3U.3T)<br>VR301<br>IC301 | REC mode<br>S-VHS SW to OFF | ●Oscilloscope to TP2XY connector pin ①(TP3T) (HEAD-AMP)<br>●Oscilloscope's GND to TP2XY connector pin ② (TP3U)(HEAD-AMP)<br>●VR301(HEAD-AMP)<br>DIV 10mV<br>TIM 20μsec<br>(10:1) | 1. Short circuit AUX AUDIO socket(L-CH and R-CH).<br>2. Adjust VR301 so that the amplitude of waveform on display is 190mVp-p.<br><br> |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 39 | BPF<br><br> PCB Hi-Fi/NIC (COMPONENT SIDE)<br>✽HS-E82,HS-E82(IR),HS-E82(NZ)<br>TP7<br>TP3R<br>IC7A3<br>VC7A0<br>BPF7A0<br>IC7A6<br>IC7Y1<br><br> More than<br>0.5Vp-p | Supply RF signal (STEREO sound) | ●Oscilloscope to TP3(Hi-Fi/NIC)<br>●Oscilloscope's trigger to TP7 (Hi-Fi/NIC)<br>●BPF7A0(Hi-Fi/NIC)<br>●VC7A0(Hi-Fi/NIC)<br>DIV 20mV<br>TIM 1 μ sec | 1. Adjust BPF7A0 so that the magnitude of part A of below figuer is maximum.<br>Note:Perform the coil adjustment in order with refer to following figure. Adjust repeadly at least twice. The magnitude of part A is over 0.5Vp-p.<br>2. Adjust VC7A0 so that the noise lever is minimum.<br> <br>⇩<br> |
| 40 | Carrier VCXO (2)<br>※Only HS-E82 (NZ)<br><br> PCB Hi-Fi/NIC COMPONENT SIDE)<br>✽HS-E82,HS-E82(IR),HS-E82(NZ)<br>IC7A3<br>VC7A0<br>TP1<br>IC7A6<br>IC7Y1<br>TP1N<br>TP3F<br>TP3E | STOP mode<br>Don't supply RF signal | ●Frequency counter to TP1 (Hi-Fi/NIC)<br>●VC7A0(Hi-Fi/NIC) | 1. Connect TP1N(Hi-Fi/NIC PCB) to GND.<br>2. Adjust VC7A0 so that the frequency is 5.849970MHz±10Hz. |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| Decoder Circuit ※HS – E82 (Y), HS – E82 (A), HS – E82 (G) | | | | |
| 41 | Audio DET Coil<br><br> PCB Hi-Fi/DEC (COMPONENT SIDE)<br>✽HS-E82(A),HS-E82(G),HS-E82(Y)<br>TP32<br>TP31<br>IC7A1<br>TP34<br>L7A3<br>IC7A0<br>L7A1<br>L7A2<br>IC161 | Supply RF signal(STEREO mode) | [Main CH DET Out]<br>●Oscilloscope to TP31(Hi-Fi/DEC)<br>●L7A2(Hi-Fi/DEC)<br>[Sub CH DET Out]<br>●Oscilloscope to TP32(Hi-Fi/DEC)<br>●L7A1(Hi-Fi/DEC)<br>[Pilot DET Out]<br>●Oscilloscope to TP34(Hi-Fi/DEC)<br>●L7A3(Hi-Fi/DEC) | 1. Adjust L7A2 so that Main CH DET Out (1kHz) at TP31 is maximum(approx. 0.3Vp-p). Check that the waveform at TP31 has no distortion.<br>2. Turn L7A1 clockwise. Adjust L7A1 so that the DET Out(1kHz) at TP32 is maximum(approx. 2.3Vp-p). Check that the waveform of DET Out at TP32 has no distortion.<br>3. Adjust L7A3 so that the waveform of Pilot DET Out at TP34 becomes sine wave without distortion.<br><br>(a) Before Adjustment<br><br>(b) After Adjustment (Pilot DET Out) |
| 42 | B.P.F<br><br> PCB Hi-Fi/DEC (COMPONENT SIDE)<br>✽HS-E82(A),HS-E82(G),HS-E82(Y)<br>IC7A1<br>TP36<br>TP35<br>VR7A1<br>VR7A2<br>IC7A0<br>IC161 | | [Dual Mode]<br>●Oscilloscope to TP35(Hi-Fi/DEC)<br>●VR7A2(Hi-Fi/DEC)<br>[Stereo Mode]<br>●Oscilloscope to TP36(Hi-Fi/DEC)<br>●VR7A1(Hi-Fi/DEC) | 1. Apply the dual mode RF signal.<br>Note:Video signal and TV CH for the dual mode RF signal should be the same for the stereo mode RF signal<br>Adjust VR7A2 so that the amplitude of Pilot tone(274.1Hz) at TP35 is maximum. Check that the amplitude of Pilot tone (274.1Hz) at TP35 is more than 5.5Vp-p.<br>2. Apply the stereo mode RF signal. Adjust VR7A1 so that the amplitude of Pilot tone(117.5Hz) at TP36 is maximum. Check that the amplitude of Pilot tone (117.5Hz) at TP36 is more than 5.5Vp-p. |
| 43 | TU-Comp. Level<br><br> PCB Hi-Fi/DEC (COMPONENT SIDE)<br>✽HS-E82(A),HS-E82(G),HS-E82(Y)<br>TP31<br>IC7A1<br>IC7A0<br>VR7A5<br>IC161 | Supply RF Signal having Normal Audio | ●AC Voltmeter to TP31(Hi-Fi/DEC)<br>●VR7A5(Hi-Fi/DEC) | 1. Apply a 64dB to 80dB(0dB=1 μV) TV signal having 30% modulation normal audio signal to antenna terminal of the VCR and tune to the TV signal.<br>2. Adjust VR7A5 so that the output level at TP31 is -17dBm(0dBm=0.775Vrms) |

| No. | ITEM | MODE | ADJ. METHOD | ADJUSTMENT PROCEDURE |
|---|---|---|---|---|
| 44 | DET-OUT Balance<br>PCB Hi-Fi/DEC (COMPONENT SIDE) ●HS-E82(A) HS-E82(G) HS-E82(Y)<br> | Supply RF signal (Stereo mode) | ●AC Voltmeter to TP33(Hi-Fi/DEC)<br>●VR7A0(Hi-Fi/DEC) | 1. Apply the stereo mode RF signal.<br>2. Adjust VR7A0 so that the amplitude of leakage signal (1kHz) at TP33 is minimum.<br>Note: This adjustment should be done precisely decause it determines the separation. |
| 45 | Level Adjust.<br>PCB Hi-Fi/DEC (COMPONENT SIDE) ●HS-E82(A) HS-E82(G) HS-E82(Y)<br> | Supply TV signal having normal audio | ●AC Voltmeter to TP37(Hi-Fi/DEC)<br>●VR7A3(Hi-Fi/DEC)<br>●AC Voltmeter to TP38(Hi-Fi/DEC)<br>●VR7A4(Hi-Fi/DEC) | 1. Apply a 64dB to 80dB(0dB=1 μV) TV signal having 30% modulation normal audio signal to antenna terminal of the VCR and tune to the TV signal.<br>2. Adjust VR7A3 so that the output level at TP37 is -17dBm(0dBm=0.775Vrms).<br>3. Adjust VR7A4 so that the output level at TP38 is -17dBm(0dBm=0.775Vrms) |

NOTE 1 : RF SIGNAL

| | STEREO MODE | DUAL MODE |
|---|---|---|
| PILOT | 50% AM MOD | 50% AM MOD |
| MAIN CH | NO MODURATION | 1kHz, 100% FM MOD |
| SUB CH | 1kHz, 100% FM MOD | 400Hz, 100% FM MOD |
| RF INPUT | 70dB (0dB = 1 μ V) | 70dB (0dB = 1 μ V) |

# MECHANICAL ADJUSTMENT AND REPLACEMENT (F DECK)

## 1. Cleaning of Deck

The following parts require cleaning whenever serviced to maintain satisfactory performance.

### 1-1 Video Head

A. Clean the video heads in the following method if dust and other foreign objects on the video heads disturb the normal playback of images :
Dampen video head cleaning cloth with alcohol. Hold the cloth against the drum and turn the drum slowly counterclockwise to clean.
**Note** :
Do not directly touch the head attached to the upper drum. The head is very hard but brittle to impact, especially in the vertical direction.
Do not apply force in the vertical direction.

B. Allow residual alcohol to dry thoroughly before running tape. Otherwise, the liquid may stick to and damage the tape.

### 1-2 Tape Transport (Refer to Fig. 1-1.)

Clean the following parts of the tape transport.

1. Tension regulation arm S
2. Tension arm
3. Supply guide pole
4. FE head
5. Supply impedance roller
6. Supply guide roller
7. Supply slant pole
8. Upper and lower drum
9. Takeup slant pole
10. Takeup guide roller
11. Takeup impedance roller
12. A/C head
13. Takeup guide pole
14. Pinch roller
15. Capstan shaft
16. Takeup guide arm
17. Tension regulation arm T

A. Clean the tape transport with gauze dampened with alcohol, except the supply and takeup guide rollers.
If Guide rollers are stained with dust, clean them with dry gauze or exchange them for new parts.

B. Allow residual alcohol to dry thoroughly before running a tape. Otherwise the liquid may stick to and damage the tape.

### 1-3 Reel Disk Drive System

A. Clean the reel disk braking surfaces and the reel belt.

B. Clean the above parts with gauze dampened with alcohol.

C. Allow the residual liquid to dry thoroughly before operating the reel disk.

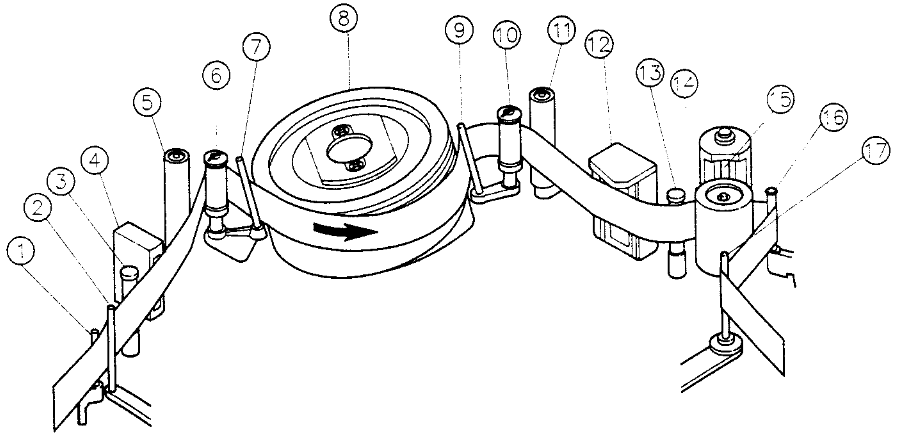


Fig.1 – 1

## 2. Replacement of Major Parts

### 2-1 Cassette Housing

#### 2-1-1 Removal (Refer to Fig. 2-1-1~2-1-2.)

A. Set the VCR to the eject mode.

B. Remove the top panel, bottom panel, and front panel.

C. Unfasten the snap of the cable holder and remove the cable holder from the cassette housing as shown in Fig.2-1-1.

D. Unscrew four cassette housing fastening screws (ⓐ,ⓑ,ⓒ, and ⓓ). Raise the cassette housing slowly in the direction shown by the arrow.

#### 2-1-2 Installation (Refer to Fig.2-1-1~2-1-3.)

A. Slowly lower the cassette housing onto the main plate of the deck so that the safety lever enters between the insert guide and the shaft as shown in Fig.2-1-1.
Align the two positioning holes (ⓔ and ⓕ) and the two U holes (ⓖ and ⓗ) located on the cassette housing with the matching holes in the deck.

B. In step A above, if the front loading gear of the cassette housing does NOT engage the boss on the main plate, carefully push the gear toward the front of the VCR using a small-diameter screwdriver, as illustrated in Fig.2-1-3. If the gear still will not engage, rotate the Front Loading Gear a few degrees from the below the deck until the gear engages the boss correctly.

C. Fasten the housing to the deck with the four screws (ⓐ,ⓑ,ⓒ and ⓓ).

### 2-2 Lock arm and Drive gear

#### 2-2-1 Removal (Refer to Fig. 2-1-3~2-2.)

A. Unfasten four snaps (ⓐ,ⓑ,ⓒ and ⓓ) as shown in Fig.2-1-3, and remove the side plate TU.

B. Turn the FL SW lever clockwise to separate the FL SW lever from the drive gear, and pull the lock arm and drive gear to remove them from the shaft as shown in Fig.2-2.

#### 2-2-2 Installation (Refer to Fig.2-1-3~2-2.)

A. Install the drive gear on the shaft as shown in Fig.2-2.

B. Line the matching mark on the drive gear and beginning of gear section on the lock arm as shown in Fig.2-2, and install the lock arm.

C. Install the side plate TU to the cassette housing, and secure it with four snaps (ⓐ,ⓑ, ⓒ and ⓓ) as shown in Fig.2-1-3.

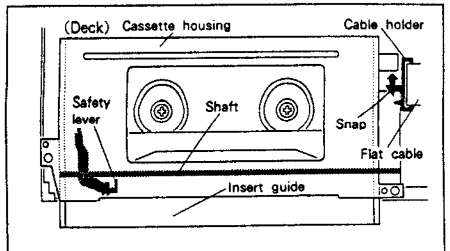

(Deck)
Cassette housing
Cable holder
Safety lever
Shaft
Snap
Flat cable
Insert guide

Fig. 2 – 1 – 1

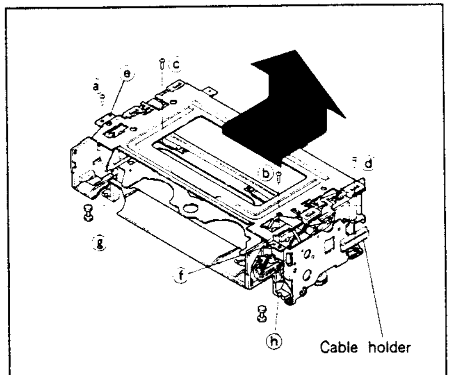

a
e
f c
ⓑ
d
ⓖ
ⓖ
f
ⓖ
ⓗ
Cable holder

Fig. 2 – 1 – 2 F0D002

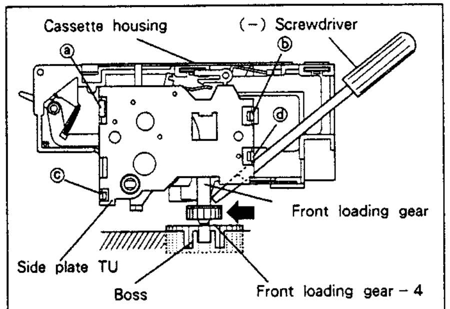

Cassette housing
(–) Screwdriver
ⓐ
ⓑ
ⓓ
ⓒ
Front loading gear
Side plate TU
Boss
Front loading gear – 4

Fig. 2 – 1 – 3 F0D003

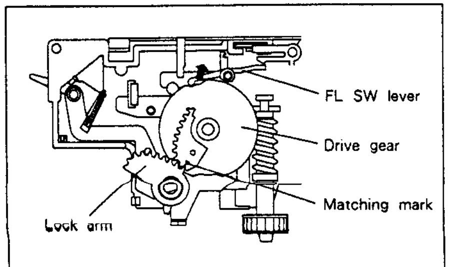

FL SW lever
Drive gear
Matching mark
Lock arm

Fig. 2 – 2

### 2-3 Drum Assembly

#### 2-3-1 Removal (Refer to Fig. 2-3-1~2-3-3.)

A. Unscrew the brush fastening screw and remove the brush.

B. Unscrew two fastening screws (ⓐ and ⓑ) and remove the head amplifier PCB which is connected to the drum assembly.
**Note** :
The cable and connector between the drum and head amplifier may be damaged if the cable is pulled strongly, as the cable is short. Remove the shield cap of the PCB, raise the PCB slightly and disconnect the flat cable. ( Removal method for the flat cable connector and stopper is shown in Fig.2-3-3.)
Disconnect the grounding wire and remove the head amplifier PCB.

C. Unscrew three drum fastening screws (ⓒ,ⓓ and ⓔ) from the reverse side of the deck.

D. Remove the drum assembly by raising it with care not to touch other parts around the drum assembly.

E. Disconnect the connectors from the drum assembly.

#### 2-3-2 Installation (Refer to Fig. 2-3-1,2-3-2.)

A. Connect the connectors to a new drum assembly.

B. Place the new drum assembly on the main plate of the deck slowly with care not to touch other parts.

C. Fasten the drum assembly with three fastening screws (ⓒ, ⓓ and ⓔ) on the reverse side of the deck.

D. Connect the head amplifier PCB to the drum assembly and fasten the PCB with two screws (ⓐ and ⓑ).
**Note** :
Conduct the mechanism interchangeability adjustment outlined in Para. 3 to give optimum performance when the drum assembly is replaced.

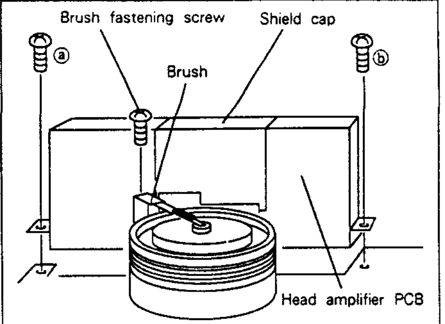

Brush fastening screw
Shield cap
ⓐ
ⓑ
Brush
Head amplifier PCB

Fig. 2 – 3 – 1 F0D007

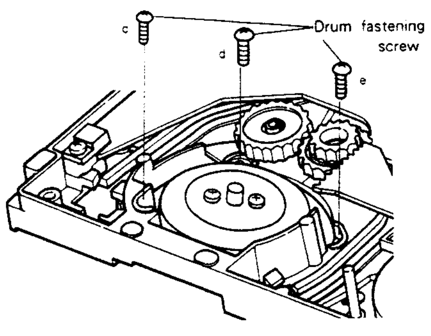

c
d
e
Drum fastening screw

Fig. 2 – 3 – 2 F0D008

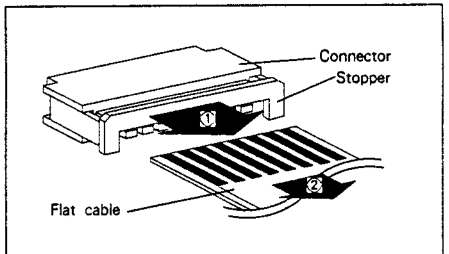

Connector
Stopper
①
②
Flat cable

Fig. 2 – 3 – 3 F0D009

## 2-4 Upper Drum

### 2-4-1 Removal (Refer to Fig. 2-4-1.)

A. Unscrew the brush fastening screw and remove the brush.
B. Unsolder two inside soldered terminals of each head on the upper drum.
C. Unscrew the upper drum fastening screws.
D. Remove the upper drum slowly and carefully.

**Note :**
If the upper drum is difficult to remove, heat the upper drum fastening screw holes with a soldering iron, and the drum will be easily removed.

### 2-4-2 Installation (Refer to Fig. 2-4-1.)

**Note :**
Handle the upper drum carefully as the video heads are fragile.

A. Position the lower drum so that the hole in the shaft faces the operator. Align the upper drum with the lower drum so that the CH1 mark on the upper drum is on the right side, and couple the drums.
B. Fasten the upper drum with two screws. (Tighten the screws alternately.)
C. Solder the terminals not soldered on the upper drum.
D. Clean the video heads as outlined in Para. 1-1.

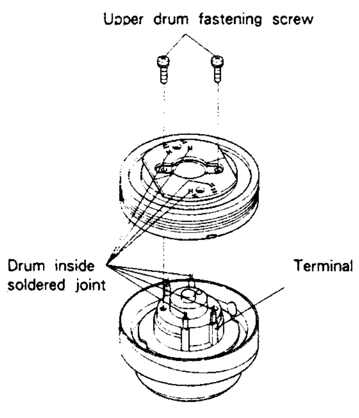

Upper drum fastening screw
Drum inside soldered joint
Terminal

Fig. 2 – 4 – 1 F0D010

## 2-5 Reel Belt (Refer to Fig. 2-5)

A. Remove the reel belt from the capstan motor and the belt pulley.
B. Install a new reel belt.

**Note :**
Make certain that the new belt is free from grease, before installing.

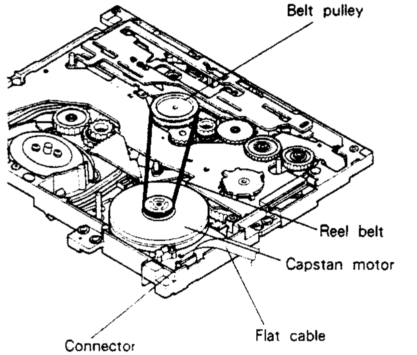

Belt pulley
Reel belt
Capstan motor
Flat cable
Connector

Fig. 2 – 5 F0D011

## 2-6 Capstan Motor

### 2-6-1 Removal (Refer to Fig. 2-5, 2-6)

A. Disconnect the flat cable.
B. Remove the reel belt.
C. Remove three fastening screws shown in Fig. 2-6 and remove the capstan motor.

**CAUTION :**
Restrain the capstan motor as the three screws are removed, since an un-restrained motor may damage other parts of the deck. When performing removal or installation of the capstan motor,take care that the outside of the rotor's rim is not greased.(Refer to Fig.2-5.)
If greasy components are attached on the outside of the rotor's rim, wipe them off with a dry cloth because they may cause defects during special effects playback.

### 2-6-2 Installation (Refer to Fig. 2-5, 2-6.)

A. Fasten the motor with three fastening screws.(Refer to Fig. 2-6.)
B. Install the reel belt.
C. Connect the flat cable.

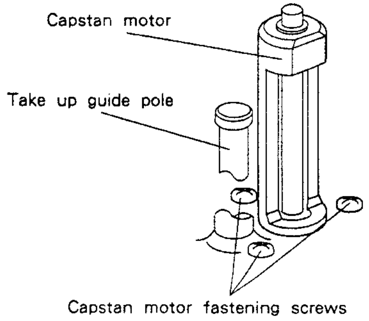

Capstan motor
Take up guide pole
Capstan motor fastening screws

Fig. 2 – 6 F0D012

## 2-7 Loading Motor

### 2-7-1 Removal (Refer to Fig. 2-7-1, 2-7-2.)

A. Set the VCR to the eject mode.
B. Unscrew the humidity sensor assembly fastening screw and remove the humidity sensor assembly.
C. Disconnect the wires from the loading motor.
D. Remove two stoppers securing the motor and the motor holder plate.(Refer to Fig. 2-7-2.)
E. Slide the motor and motor holder plate away, and then raise them to remove.
F. Unscrew two screws and detach the motor holder plate from the motor.
G. Disconnect the coupling from the motor.

### 2-7-2 Installation (Refer to Fig. 2-7-1~2-7-3.)

A. Fasten the coupling to a new loading motor. (Refer to Fig. 2-7-3.)
B. Fasten the motor holder plate to the motor with two screws.
C. Place the motor and motor holder plate in the motor holder to the rear of the deck.
D. Turn the motor shaft so that the coupling on the loading motors shall match the worm gear of the motor holder. Slide the loading motor forward and secure it with the stoppers.
E. Solder the leads to the loading motor. (Brown lead wire to the positive terminal and red lead wire to the negative terminal.)
F. Fasten the humidity sensor assembly with fastening screw.

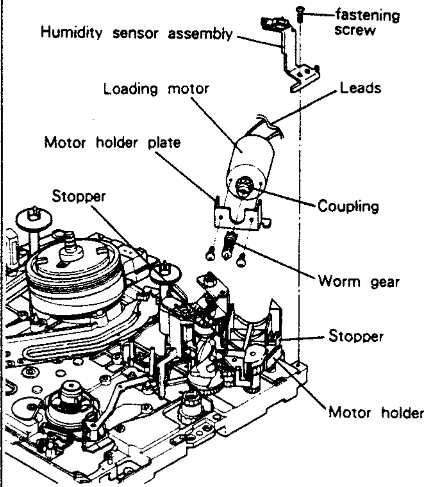

Humidity sensor assembly
fastening screw
Loading motor
Leads
Motor holder plate
Stopper
Coupling
Worm gear
Stopper
Motor holder

Fig. 2 – 7 – 1 F0D013

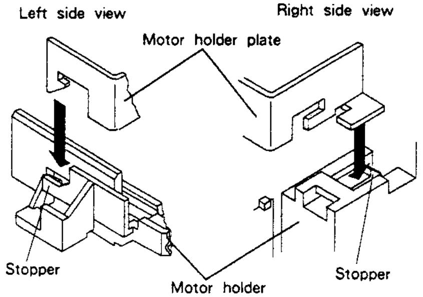

Left side view
Right side view
Motor holder plate
Stopper
Motor holder
Stopper

Fig. 2 – 7 – 2 F0D014

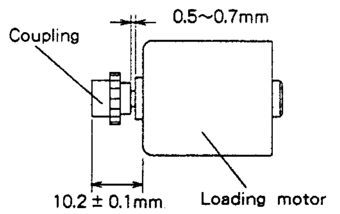

0.5~0.7mm
Coupling
10.2 ± 0.1mm
Loading motor

Fig. 2 – 7 – 3 F0D015

## 2-8 Pinch Roller

### 2-8-1 Removal (Refer to Fig. 2-8-1, 2-8-2.)

A. Set the VCR to the eject mode.
B. Remove the pinch roller arm cap and the grip ring which secures the pinch roller arm assembly.
C. Pull the pinch roller arm assembly upwards to remove.
D. Remove the pinch roller cap from the pinch roller arm, and remove the pinch roller. (Refer to Fig. 2-8-2.)

### 2-8-2 Installation (Refer to Fig. 2-8-1,2-8-2.)

A. Assemble the pinch roller cap and the pinch roller to the pinch roller arm by exercising care with the installation angle of the pinch roller cap and the marking of the Pinch Roller. (Refer to Fig. 2-8-2.)
B. Assemble the pinch roller assembly to the shaft on the main plate.
C. Secure the pinch roller arm assembly with the pinch roller arm cap and the grip ring.

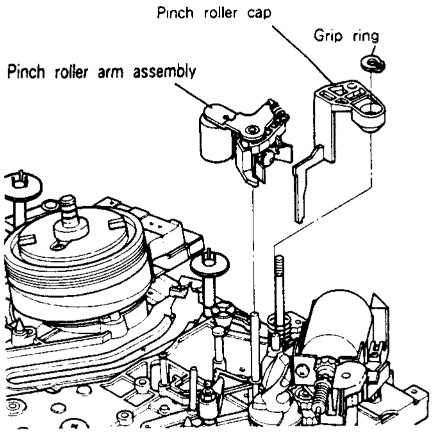

Pinch roller cap
Grip ring
Pinch roller arm assembly

Fig. 2-8-1 F0D016

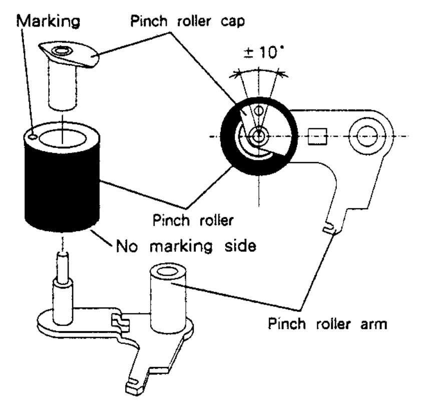

Marking
Pinch roller cap
± 10°
Pinch roller
No marking side
Pinch roller arm

Fig. 2-8-2 F0D017

## 2-9 Mode Switch

**Note :**
Replace the mode switch with the VCR in the eject mode.

### 2-9-1 Removal (Refer to Fig. 2-9-1)

A. Unsolder the five soldered joints of the mode switch from the deck PCB.
B. Unfasten two catches fastening the switch to the deck PCB assembly. (Exercise care as the catches may be broken off.)
C. Remove the mode switch slowly while assuring that the soldered joints are all unsoldered.

### 2-9-2 Installation ( Refer to Fig. 2-9-1,2-9-2.)

A. Line the matching marks of the mode switch. (Refer to Fig. 2-9-2.)
B. Finely adjust the mode switch so that continuity at each terminal shall be as given in the illustration.
C. Fasten the switch to the deck PCB with care so that the switch shall not turn, and secure with two catches.(Refer to Fig. 2-9-1.)
D. Solder the five terminals which connect the mode switch to the deck PCB assembly.

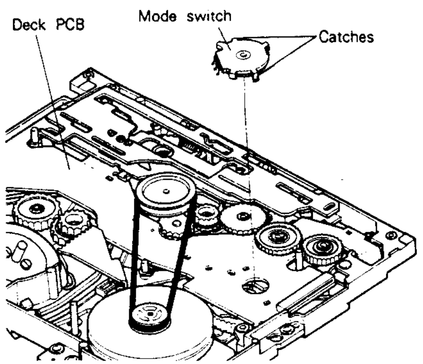

Deck PCB
Mode switch
Catches

Fig. 2-9-1 F0D018

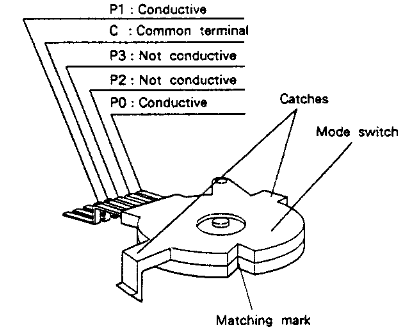

P1 : Conductive
C : Common terminal
P3 : Not conductive
P2 : Not conductive
P0 : Conductive
Catches
Mode switch
Matching mark

Fig. 2-9-2 F0D019

## 2-10 Supply Reel Disk

### 2-10-1 Removal (Refer to Fig. 2-10-1~2-10-3.)

A. Remove the cassette housing as in Para. 2-1-1.
B. Unscrew the screw ⓐ which fastens the T band holder.
C. Unfasten the catch of the T band holder from the main plate with a small screw driver etc. as shown in Fig. 2-10-2. Raise and remove the T band holder with care not to score or dirty the tension brake belt.
D. Detach the tension spring from the tension arm and the tension lever.
E. Remove the grip ring ⓑ which secures the tension arm. Raise the tension arm upward to remove it from the shaft.
F. Detach the tension regulation spring S from the tension regulating arm S and the tension lever.
G. Detach the safety lever spring from the safety lever and the tension lever.

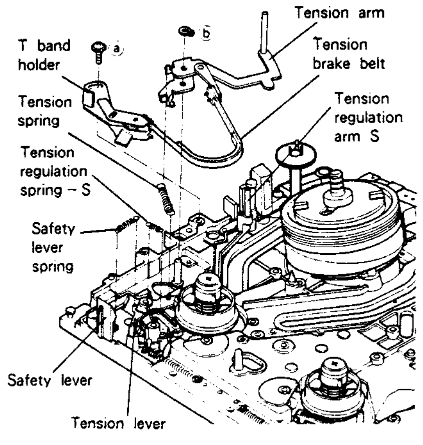

Tension arm
ⓑ
T band holder
ⓐ
Tension brake belt
Tension spring
Tension regulation arm S
Tension regulation spring - S
Safety lever spring
Safety lever
Tension lever

Fig. 2-10-1 F0D020

H. Raise the tension lever avoiding the main brake S and remove the lever from the shaft. (Refer to Fig. 2-10-3.)

I. Raise the tension regulation arm S and remove it from the shaft.

J. While turning the main brake S slightly clockwise to separate the brake from the supply reel disk, and raise the supply reel disk to remove it from the shaft. (Refer to Fig. 2-10-3.)

## 2-10-2 Installation (Refer to Fig. 2-10-4~2-10-7.)

A. Turn the main brake S slightly clockwise to separate it from the supply reel disk shaft, and mount the supply reel disk on the shaft so that the reel gear meshes with the gear of the supply reel disk.

B. Assemble the tension regulation arm S to the shaft.

C. Assemble the tension lever to the shaft avoiding the main brake S.

**Note :**
Install the tension lever so that the pin at the lower part of the lever shall be in front of the slot in the main plate (viewing the front).

D. Fasten the safety lever spring to the safety lever and the tension lever.

E. Fasten the tension regulation spring S to the tension regulation arm S and the tension lever.

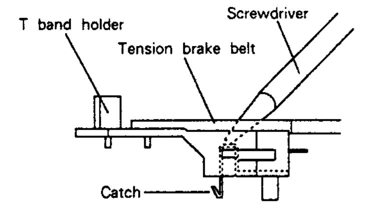

Screwdriver
T band holder
Tension brake belt
Catch

Fig. 2 - 10 - 2 F0D021

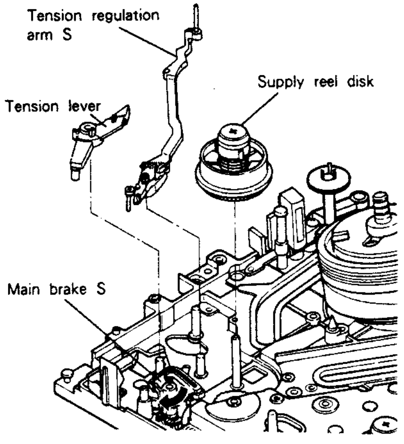

Tension regulation arm S
Tension lever
Supply reel disk
Main brake S

Fig. 2 - 10 - 3 F0D022

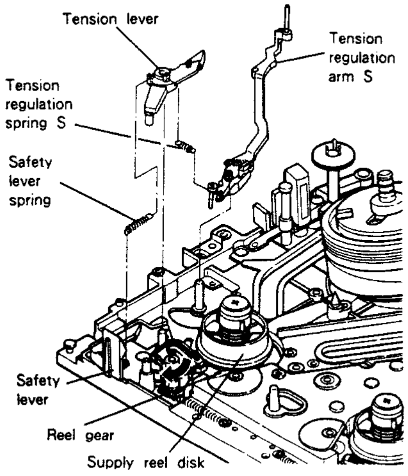

Tension lever
Tension regulation arm S
Tension regulation spring S
Safety lever spring
Safety lever
Reel gear
Supply reel disk

Fig. 2 - 10 - 4 F0D023

F. Assemble the tension arm to the shaft and secure the arm with the grip ringⓑ.(Refer to Fig. 2-10-5.)

G. Fasten the tension spring to the tension arm and the tension lever.(Refer to Fig. 2-10-5.)

H. Assemble the T band holder to the main plate with care not to score or dirty the tension brake belt, and secure the holder with the screwⓐ lightly.(Refer to Fig. 2-10-5.)

**Note :**
In the assembly of the T band holder, make certain that the hook of the holder positively engages with the reverse side of the main plate.
If the hook is difficult to engage with the main plate, push the hook lightly with a small screw driver etc.(Refer to Fig. 2-10-2.)

I. Separate the main brake S and the tension regulation arm S from the supply reel disk and make certain that the disk turns freely.

J. Place the reel disk adjusting jig (Part Number 859C342020) in the reference position on the main plate.(Refer to Fig. 2-10-6.)

K. Slowly turn the jig about the point A and make sure that the height of the supply reel disk flange shall agree with the point B on the supply disk adjusting side of the jig (marked SP).(Refer to Fig. 2-10-7.)

L. If the height of the disk is not satisfactory, hold the disk so that it shall not turn, and turn the height adjusting screw at the top of the disk to adjust the height. (Refer to Fig. 2-11-3.)
  A) Turn the screw clockwise if the measured height is low.
  B) Turn the screw counterclockwise if the measured height is high.

M. On completion of adjustment, lock the height adjusting screw by burning it with the tip of the hot iron.

N. Install the cassette housing as in Para. 2-1-2.

O. Adjust back tension and tension pole position as outlined in Para. 3-1.

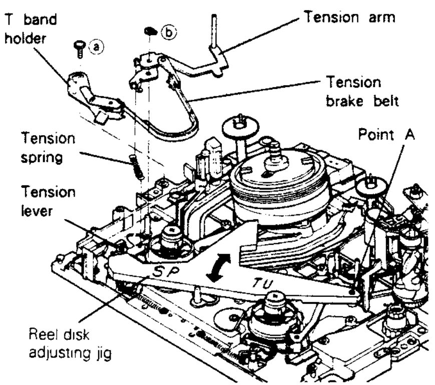

T band holder
ⓐ
ⓑ
Tension arm
Tension brake belt
Point A
Tension spring
Tension lever
SP
TU
Reel disk adjusting jig

Fig. 2 - 10 - 5 F0D024

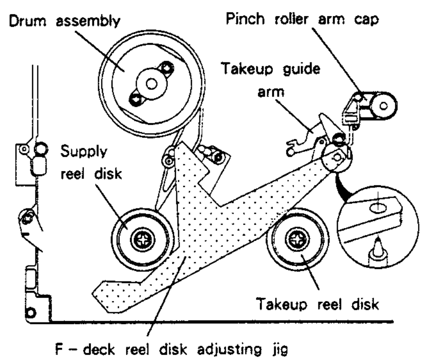

Drum assembly
Pinch roller arm cap
Takeup guide arm
Supply reel disk
Takeup reel disk
F - deck reel disk adjusting jig

Fig. 2 - 10 - 6 F0D025

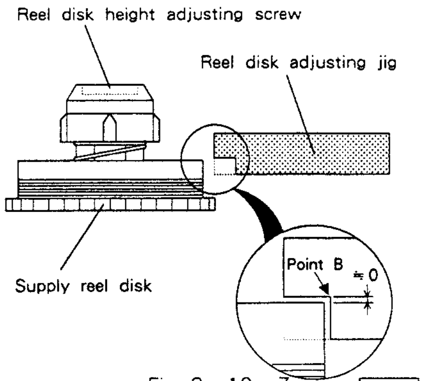

Reel disk height adjusting screw
Reel disk adjusting jig
Supply reel disk
Point B
≒0

Fig. 2 - 10 - 7 F0D026

## 2-15 Positioning and Installation Sequence of Parts Around Main Cam 1 (Bottom Side of Deck) (Refer to Fig. 2-15-1~2-15-6.)

**Note** :

Set the VCR to the eject mode to install the main cam 1 and its peripheral parts.

A. Line the positioning hole in the lever RS and that of the main plate, and assemble the lever RS to the shaft.

B. Line the positioning hole in the lever C with that of the main plate, and assemble the lever C to the shaft.

C. With care not to move the lever RS and lever C, assemble the main cam 1 to the shaft by lining the matching mark of the joint gear with the positioning hole of main plate. Secure the main cam 1 with the grip ring.(Refer to Fig. 2-15-2.)

**Note** :

The pins of the lever RS and the lever C enter the groove of the main cam 1 when the levers are lined with the positioning holes.

Make certain that the pins of the levers enter the groove of the main cam 1.

D. Assemble the thrust washer to the pin ⓒ shown in Fig. 2-15-2, and install the cam plate C so that the corresponding positions of the plate shall match the pins ⓐ to ⓖ.

E. Fasten the cam spring C to the cam plate C and the cam plate holder.(Refer to Fig. 2-15-2.)

F. Assemble the lever B to the shaft so that the pin of the lever shown in Fig. 2-15-3 shall enter the groove of the main cam 1. Secure the lever with a grip ring.

G. Line the positioning hole of the F/L idler lever with that of the main plate.(Refer to Fig. 2-15-3.)

**Note** :

The pin of the F/L idler lever enters the groove of the main cam 2 when the positioning hole of the F/L idler lever is lined.

Make certain that the pin of the lever enters the groove of the main cam 2.

H. Line the matching mark of the main cam 2 with that of the main cam 1, and also the positioning hole of the main cam 2, and assemble the main cam 2 to the shaft. (Refer to Fig. 2-15-3.)

**Note** :

Make certain that the pin of the F/L idler lever correctly enters in the groove of the main cam 2.

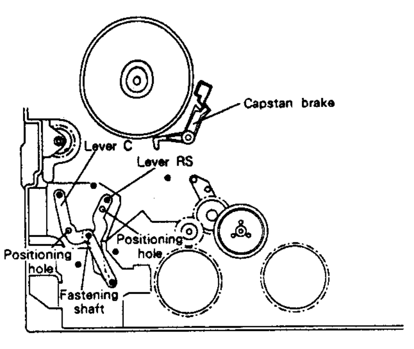

Capstan brake
Lever C
Lever RS
Positioning hole
Positioning hole
Fastening shaft

Fig. 2 − 15 − 1 F0D039

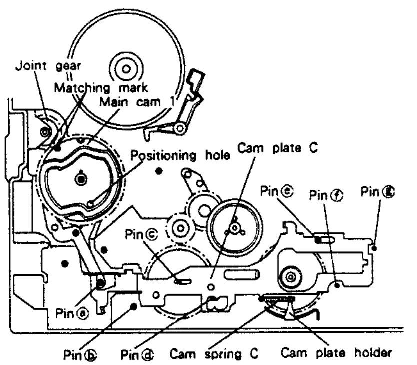

Joint gear
॥
Matching mark
Main cam 1
Positioning hole
Cam plate C
Pin ⓔ
Pin ⓕ
Pin ⓖ
Pin ⓒ
Pin ⓐ
Pin ⓑ
Pin ⓓ
Cam spring C
Cam plate holder

Fig. 2 − 15 − 2 F0D040

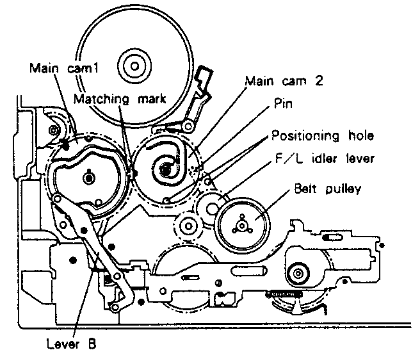

Main cam1
Matching mark
Main cam 2
Pin
Positioning hole
F/L idler lever
Belt pulley
Lever B

Fig. 2 − 15 − 3 F0D041

I. Make certain that the mode switch is in the eject position. Fasten the deck PCB assembly with five screws and solder the FE head terminals.(Refer to Fig. 2-14-2 and 2-14-1.)

**Note** :

The safety lever is normally held in a positionto the left by the spring. Pull the lever forwards and install the deck PCB assembly.

J. Install the cam plate B so that the plate shall match the pins ⓐ to ⓖ as shown in Fig. 2-15-4, especially the pin ⓔ, and secure the plate with three clamps, cut washer (pin ⓑ) and grip ring (pin ⓕ).

K. Line the matching mark of the loading arm T with that of the loading gear arm as shown in Fig. 2-15-4, and assemble the loading gear arm to the shaft so that the pin of the loading gear arm shall enter the groove of the main cam 2. Secure the arm with two grip rings ⓕ.(Refer to Fig. 2-15-5.)

L. Assemble the F/L gear 2, 3, and 4 to the shafts as shown in Fig. 2-15-5.

M. Install the reel belt. (Refer to Fig. 2-5.)

N. Fasten the tension regulation spring T and the spring RS to the tension regulation arm T and the lever RS from the top side of the deck. (Refer to Fig. 2-11-1.)

O. Fasten the capstan brake spring to the capstan brake and the loading gear arm from the top side of the deck. (Refer to Fig. 2-15-6.)

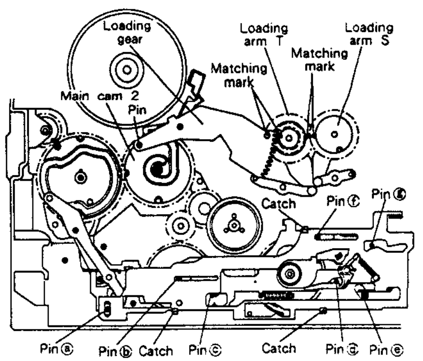

Loading gear
Loading arm T
Loading arm S
Matching mark
Matching mark
Main cam 2
Pin
Catch
Pin ⓕ
Pin ⓖ
Pin ⓐ
Pin ⓑ
Catch
Pin ⓒ
Catch
Pin ⓓ
Pin ⓔ

Fig. 2 − 15 − 4 F0D042

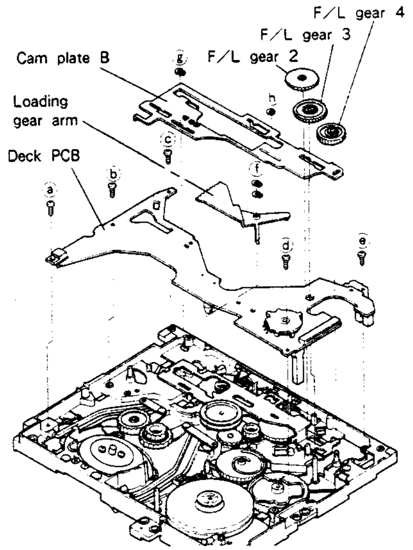

F/L gear 4
F/L gear 3
Cam plate B
ⓖ
F/L gear 2
Loading gear arm
ⓑ
ⓒ
Deck PCB
ⓑ
ⓕ
ⓐ
ⓓ
ⓔ

Fig. 2 − 15 − 5 F0D037

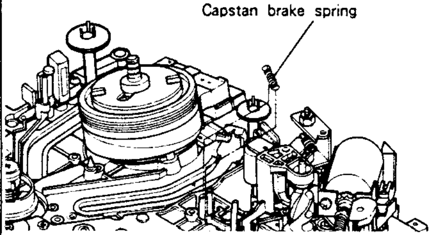

Capstan brake spring

Fig. 2 − 15 − 6 F0D036

## 2-16 Supply and Takeup Guide Rollers

### 2-16-1 Removal (Refer to Fig. 2-16.)

A. Remove the cassette housing as in Para. 2-1-1.

B. Loosen the set screw to such a degree as the guide roller turns lightly.

C. Loosen the guide roller height adjusting screw located at the top of the guide roller by turning counterclockwise with the height adjusting screwdriver. Raise and remove the roller from the tape guide.

### 2-16-2 Installation (Refer to Fig. 2-16.)

A. Make certain that the fastening thread section of a new guide roller is provided with a rubber ring.

B. Set the new guide roller in the tape guide fastening hole.

C. Turn the guide roller slowly clockwise till it becomes stiff.

D. Turn further about 1/6 turns from a point where the guide roller becomes heavy, and return the roller about one turn counter-clockwise.

E. Again turn the guide roller slowly clockwise till it becomes heavy. Turn the roller further about 1/6 turn from the point where the roller becomes stiff.

F. Secure the guide roller lightly with the set screw. Check and adjust the envelope as in Para. 3-2.

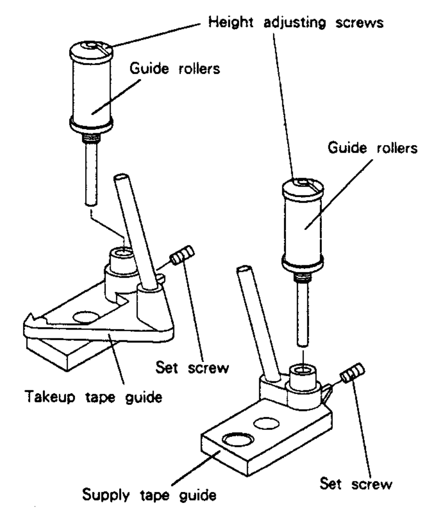


Fig. 2 – 16 F0D043

## 2-17 Supply and Takeup Tape Guide Assemblies

**Note :**
Refer to section 3-2-7 and 3-3-3 before replacing the supply or takeup tape guide assemblies.

### 2-17-1 Removal (Refer to Fig. 2-17-1~2-17-4.)

A. Remove the cassette housing as in Para. 2-1-1.

B. Detach the capstan brake spring from the capstan brake and the loading gear arm.

C. Remove the reel belt. (Refer to Fig. 2-5.)

D. Secure the tension arm and the tension regulation arm S with a rubber band etc. so as to separate them from the supply guide roller.

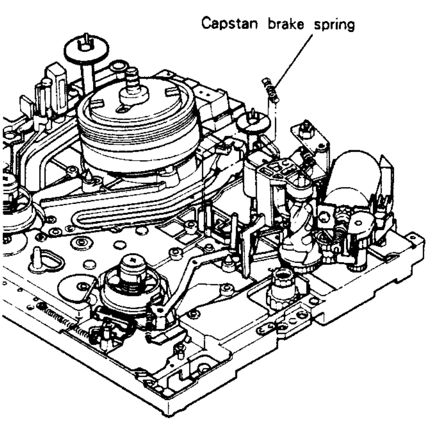


Fig. 2 – 17 – 1 F0D036

E. Remove the grip ring and remove the loading gear arm.(Refer to Fig. 2-17-2.)

F. Turn the loading arm S and T to the loading position.(Refer to Fig. 2-17-2.)

G. Unfasten the clamp shown in Fig. 2-17-3, and remove the loading arm S.

H. Remove the loading arm T further in case of replacing the takeup guide assembly.

I. Unfasten the clamp of the slider which secures the supply or takeup tape guide assembly, and remove the tape guide assembly and the slider from the main plate. (Refer to Fig. 2-17-4.)

### 2-17-2 Installation (Refer to Fig. 2-17-1~2-17-4.)

A. Place a new tape guide assembly on the installation rail of the main plate and install the slider on the reverse side of the main plate so that the catch of the slider enters the fastening hole of the tape guide assembly.

B. If the takeup tape guide is replaced, install the loading arm T at first.(Refer to Fig. 2-14-2.)

C. Install the loading arm T so that the matching mark of the loading arm S is lined with the matching mark of the loading arm T as illustrated in Fig. 2-17-2.

D. Line the matching mark of the loading gear arm with that of the loading arm T, and assemble the loading gear arm to the shaft so that the pin of the loading gear arm enters the groove of the main cam 2.
Secure the loading gear arm with two grip rings.

E. Install the reel belt.(Refer to Fig. 2-5.)

F. Fasten the capstan brake spring to the capstan brake and the loading gear arm from the top side of the deck.(Refer to Fig. 2-17-1.)

G. Install the cassette housing as in Para. 2-1-2.

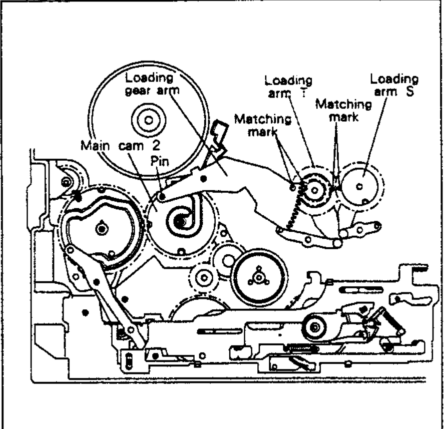


Fig. 2 – 17 – 2 F0D044

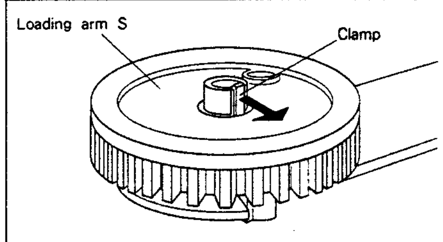


Fig. 2 – 17 – 3 F0D045

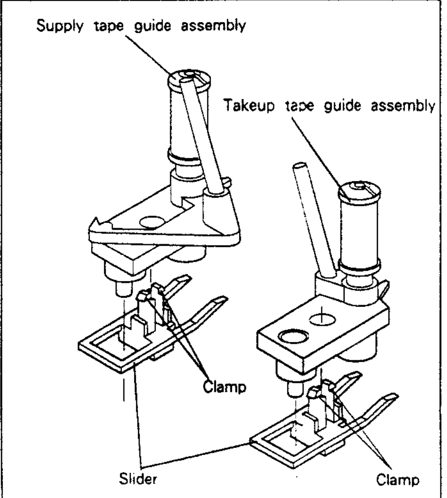


Fig. 2 – 17 – 4 F0D046

## 3. Interchangeability Adjustment of Mechnism

**Note** :

Tracking may need to be preset in the interchangeability adjustment of the mechanism.

Digital tracking should be preseted. To preset, short circuit TP8X and TP8Y on the PCB TIMER.

**Note** :

The adjustment is conducted in the playback mode, using the stair step signal of the alignment tape, connect an oscilloscope to TP2A and external Trig. to TP2H, unless otherwise specified.

### 3-1 Adjustment of Back Tension and Tension Pole Position (Refer to Fig. 3-1.)

Run a blank tape for several minutes to break in the reel disks and the transport before beginning the adjustment.

A. Set the back tension measuring jig and set the VCR to the playback mode.

B. When the running of the tape becomes steady, make certain that the tension arm check hole is within the M/P hole of the main plate (0 ± 0.5mm) or the interval between the centre of tension pole and the centre of Supply guide pole is 2 ± 0.5mm.

C. If neither the centre of Tension pole nor the tension arm check hole is in position, loosen the T band holder fastening screw lightly and move the T band holder so that the condition specified by the para.B is satisfied.

D. On completion of adjustment, tighten the T band fastening screw.

E. Make certain that the reading of the back tension measuring jig is 50 ± 6g-cm.

F. When the running of the tape is steady, check visually to make certain that the deflection of the Tension pole is 1mm or less.

**Note** :

Slight fluctuation of back tension may be tolerated, however if fluctuation exceeds 5g-cm, the reel disk etc. may be defective. Examine and correct the defect.

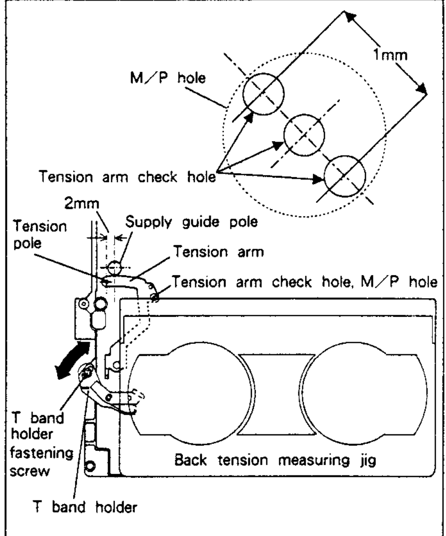


Fig. 3 − 1 F0D047

### 3-2 Check and Adjustment of FM Envelope

### 3-2-1 Guide Roller Adjustment (Refer to Fig. 3-2-1.)

A. Set the VCR to the playback mode.

B. Preset tracking.

C. Check if the FM waveform is flat like A shown in Fig. 3-2-1.

D. Adjust the height of the supply guide roller as in 3-2-2 if the leading portion (the entry side of the drum) of the FM waveform is not flat like B or C.

Adjust the height of the takeup guide roller as in 3-2-3 if the trailing portion (the exit side of the drum) is not flat like D or E.

### 3-2-2 Adjustment of Supply Guide Roller Height (Refer to Fig. 3-2-1, 3-2-2.)

A. Loosen the set screw to such a degree as the supply guide roller turns lightly.(Refer to Fig. 3-2-2.)

B. The supply guide roller is low if the leading portion (the entry side of the drum) of the FM waveform is like B, and high if like C. Adjust the height of the roller by turning the adjusting screw at the top of the roller so that the FM waveform shall be flat like A.
- Turn the adjusting screw counterclockwise if the roller is low.
- Turn the adjusting screw clockwise if the roller is high.

C. Carry out the coarse adjustment of phase as in 3-2-4.

### 3-2-3 Adjustment of Takeup Guide Roller Height (Refer to Fig. 3-2-1, 3-2-2.)

A. Loosen the set screw to such a degree as the takeup guide roller turns lightly.(Refer to Fig. 3-2-2.)

B. The takeup guide roller is low if the trailing portion (the exit side of the drum) of the FM waveform is like D, and high if like E. Adjust the height of the roller by turning the adjusting screw at the top of the roller so that the FM waveform shall be flat like A.
- Turn the adjusting screw counterclockwise if the roller is low.
- Turn the adjusting screw clockwise if the roller is high.

C. On completion of height adjustment, adjust the azimuth and height of the A/C head as in 3-3-2.

D. Coarsely adjust the phase as in 3-2-4.

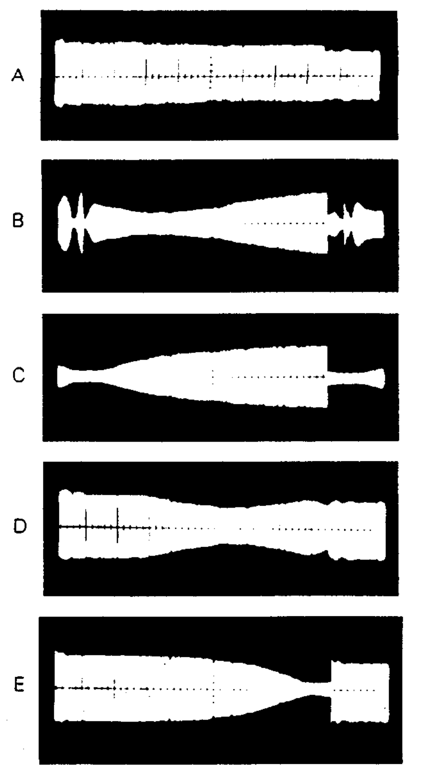


Fig. 3 − 2 − 1 F0D048~052

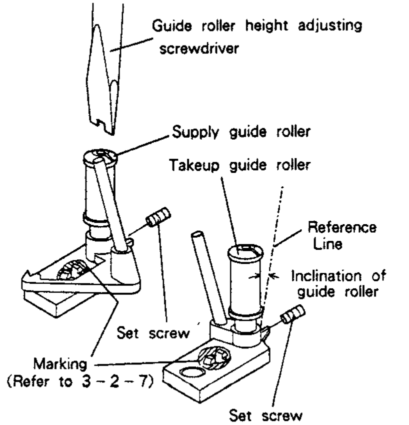

Guide roller height adjusting screwdriver
Supply guide roller
Takeup guide roller
Reference Line
Inclination of guide roller
Set screw
Marking (Refer to 3 − 2 − 7)
Set screw

Fig. 3 − 2 − 2 F0D053

**3-2-4 Coarse Phase Adjustment (Refer to Fig. 3-2-3, 3-2-4.)**

A. Set the VCR to the playback mode.
B. Preset tracking.
C. Check the FM waveform after checking and adjusting the guide rollers.
D. If the amplitude of the FM waveform is narrow like F because of out of phase, adjust the phase adjusting nut so that the amplitude of the FM waveform shall be maximum.

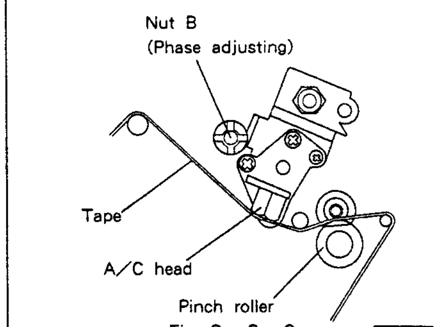


Fig. 3-2-3 F0D054

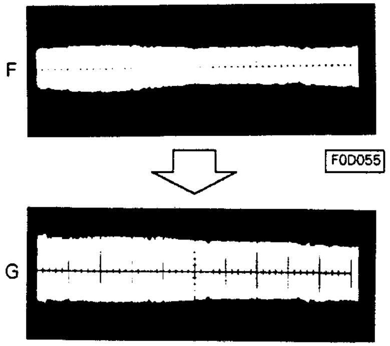
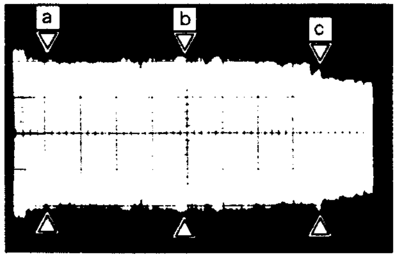


Fig. 3-2-4 F0D056

**3-2-5 Check of FM Waveform Flatness (Refer to Fig. 3-2-5.)**

A. Set the VCR to the playback mode.
B. Set the tracking switch to the manual mode. Vary tracking and check if the amplitude changes while the waveform remains flat.
C. Adjust tracking in the manual mode so that the amplitude shall be maximum, and adjust the oscilloscope so that the amplitude shall be '5' on the scale of the oscilloscope.
D. Adjust tracking so that the amplitude at the middle (around the point 'b') of the FM wave form is about 80% ('4' on the scale of the scope) of the maximum amplitude. Make certain that the amplitudes around the points 'a' and 'c' satisfy the requirements given in Fig. 3-2-5.
E. If deviating from the requirements, conduct the check and adjustment of the FM envelope as in 3-2 from beginning.



| | Normal VHS mode | S-VHS mode |
|---|---|---|
| a | At least 2.8 of the scale | At least 3.2 of the scale |
| c | At least 2.8 of the scale | At least 3.2 of the scale |

Fig. 3-2-5 F0D057

**3-2-6 Check 1 : Tape Running Condition on Guide Rollers (Refer to Fig. 3-2-6.)**

A. Set the VCR to the playback mode.
B. Visually check if there is a space between the tape and the lower flange of the supply and the take up guide roller.
C. If not, replace the tape guide as in 3-2-7.
**Note :**
In this case the tape guide should be replaced with the tape guide which has a larger inclination.
D. If the supply tape guide is replaced, check the guide roller as in 3-2-1.
If the take up tape guide is replaced, check the guide roller as in 3-2-3, and the waveform flatness as in 3-2-5
E. Load and unload the tape several times to make certain that the flatness of the FM waveform dose not change.
F. If changes occur, check the A/C arm shaft for looseness.
If not free, replace the A/C arm and adjust the audio/control head as in 3-3.

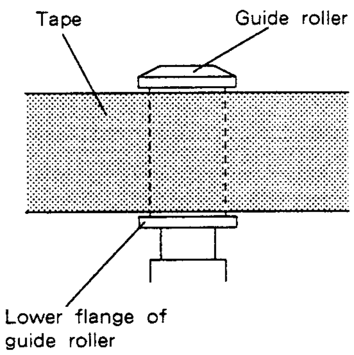


Fig. 3-2-6 F0D058

**3-2-7 Replacement of Tape Guides**

A. Identify the Item Number of the tape guide to be replaced. This is done by observing the marking present on the die-cast portion of the tape guide base, and comparing that marking to Fig. 3-2-7.
B. If the Item Number of the tape guide presently installed is a '2', replace the guide with an Item Number '1' guide.(Part No. 635B059010)
C. If the Item Number of the present tape guide is a '1', replace the guide with an Item Number '3' guide.
D. If the Item Number of the present tape guide is a '3', replace the guide with other Item Number '3' guide.
E. Once the tape guide is replaced, resume alignment starting with 3-2-1.

Identification of Tape Guide Item Number
(Example ; Parts No. 635B0590$\boxed{1}$0)
Item No.

| | |
|---|---|
| Item No.1 | No marking |
| Item No.2 | Marked with black magic marker |
| Item No.3 | Marked with red magic marker |

Fig. 3-2-7

**3-2-8 Check 2 : Tape Running Condition on Guide Rollers**

A. Set the VCR to the playback mode.
B. Press the head of the supply guide roller and the take up guide roller lightly, and release the roller. Check if the FM waveform is quickly restored to the previous level.
C. If the FM waveform is not restored quickly, replace the tape guide as in 3-2-7.
D. If the supply tape guide is replaced, check the guide roller as in 3-2-1.
If the takeup tape guide is replaced, check the guide roller as in 3-2-1, and check the FM waveform as flatness as in 3-2-5
E. If satisfactory, tighten the set screw of the guide roller on the supply side and the take up side.

## 3-3 Adjustment of Audio/Control Head

### 3-3-1 Adjustment of A/C Head Slant (Refer to Fig. 3-3-1.)

A. Play back a blank tape.

B. Turn the screw C slowly clockwise to crease the bottom edge of the tape slightly by the lower flange of the takeup guide pole.

C. Turn the screw C slowly counterclockwise to eliminate the crease of the bottom edge of the tape.

D. Turn the screw C slowly clockwise again and stop turning just before the tape is creased.

### 3-3-2 Adjustment of A/C Head Azimuth and Height (Refer to Fig. 3-3-1~3-3-3.)

A. Using stair step signal of alignment tape, connect an oscilloscope to the audio output terminal and set the VCR to the playback mode.

B. Turn the nut A (height adjusting) and the screw B (azimuth adjusting) so that the audio output level shall be maximum.

C. Turn the A/C head counterclockwise and release it to make certain that the audio output level does not change.

D. If the level changes, check if the A/C arm shaft is loose. If not free, replace the A/C arm and adjust the slant of the A/C head as in 3-3-1 and the azimuth and height of the A/C head from beginning.

E. Apply a force lightly to the A/C head shaft in the direction of A and A' of the arrow shown in Fig. 3-3-3 to make certain that the audio output level remains at maximum level and does not change.

F. If the level changes, turn the nut A (height adjusting) so that the audio output level shall be maximum. Apply a force lightly to the A/C head shaft in the direction of B and B' of the arrow shown in Fig. 3-3-3 and adjust so that the sound output level shall be maximum.

G. Check the sound output level in the playback mode to make sure that the fluctuation of the level is less than 2dBp-p.

H. If the fluctuation exceeds 2dBp-p, adjust the slant of the A/C head and the azimuth and height of the head.

I. If this is still not satisfactory, replace the takeup tape guide as outlined in 3-3-3.
**Note** :
In this case the tape guide should be replaced with a guide which has less inclination.

J. On completion of the above adjustment, adjust phase as in 3-4.

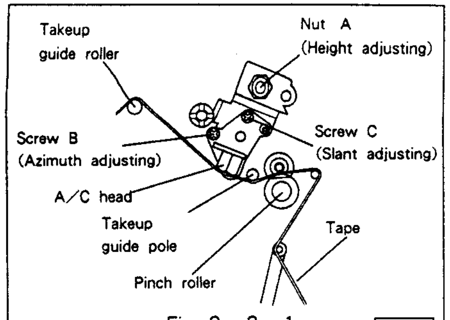


Fig. 3 − 3 − 1

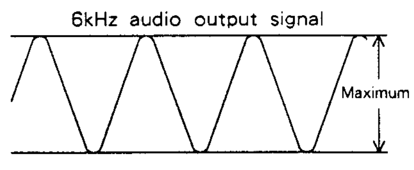


Fig. 3 − 3 − 2

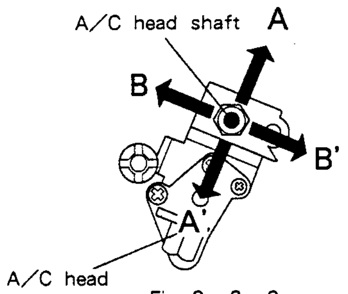


Fig. 3 − 3 − 3

Identification of Tape Guide Item Number
(Example ; Parts No. 635B06001 0)
Item No.

| | |
|---|---|
| Item No.1 | No marking |
| Item No.2 | Marked with black magic marker |
| Item No.3 | Marked with red magic marker |

Fig. 3 − 3 − 4

### 3-3-3 Replacement of Tape Guides

A. Identify the Item Number of the Tape Guide to be replaced. This is done by observing the marking present on the die-cast portion of the Tape Guide base, and comparing that marking to Fig. 3-3-4.

B. If the Item Number of the tape guide presently installed is a '3', replace the guide with an Item Number '1' guide.

C. If the Item Number of the present tape guide is a '1', replace the guide with an Item Number '2' guide.

D. If the Item Number of the present tape guide is a '2', replace the guide with other Item Number '2' guide.

E. Once the tape guide is replaced, resume alignment starting with 3-2-1.

## 3-4 Phase Adjustment (Refer to Fig. 3-4.)

A. Set the VCR to the playback mode.

B. Preset tracking.

C. Turn the phase adjusting nut to make the amplitude of the FM waveform is maximum.
**Note** :
Do not turn the phase adjusting nut exceeding one turn in either direction.

D. Turn the A/C head counterclockwise and return to make sure that the amplitude of the FM waveform is the same as that before turning the head.

E. If the amplitude changes, check the A/C arm shaft if loose. If not free, replace the A/C arm and adjust the A/C head as in 3-3 and the phase as in this section from beginning.

F. Load and unload the tape several times to make certain that the amplitude of the FM waveform does not change.

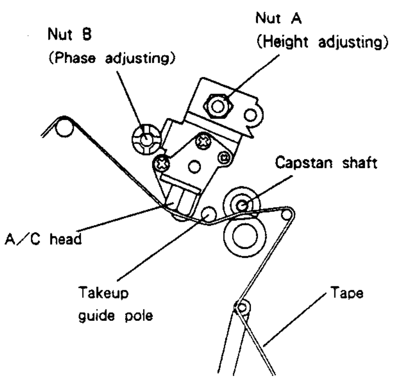


Fig. 3 − 4

### 3-5 Adjustment of Takeup Guide Arm Height (Refer to Fig. 3-5.)

A. Run a final portion of E-240 blank tape in the reverse search mode.

B. Adjust the height of the takeup guide pole by turning the height adjusting nut so that the tape shall not be creased at the upper and the lower flange portion of the take up guide pole.

**Note :**
To avoid backlash ensure the final adjustment is done in the clockwise direction.
Do not turn the nut exceeding one turn in either direction.

C. Eject the cassette tape and set to the reverse search mode again to make certain that the tape is not creased at the upper and the lower flange portion of the takeup guide pole.

D. Set to the playback mode and be sure that the tape is not creased at the upper and the lower flange portion of the takeup guide pole.

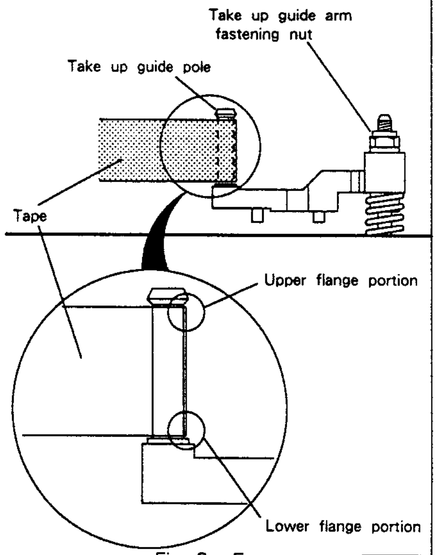


Fig. 3 – 5

# KEY TO ABBREVIATIONS

| | |
|---|---|
| **A/C** | : Audio/Control |
| **ACC** | : Automatic Colour Control |
| **A.E** | : Audio Erase |
| **AFC** | : Automatic Frequency Control |
| **AFT-D** | : Automatic Fine Tuning Door Switch |
| **AGC** | : Automatic Gain Control |
| **AL** | : After Loading |
| **AMP** | : Amplifier |
| **ANT** | : Antenna |
| **A-PB** | : Audio-Playback |
| **A-REC** | : Audio-Recording |
| **ALC** | : Automatic Level Control |
| **BPF** | : Band-Pass Filter |
| **B/W** | : Black and White |
| **BS** | : Band SW |
| **CASS** | : Cassette |
| **CP** | : Capstan |
| **CP-FG** | : Capstan-Frequency Generator |
| **CP-F/R** | : Capstan-Forward/Reverse |
| **CP-M** | : Capstan-Motor |
| **CONV** | : Converter |
| **CTL** | : Control |
| **C-LAMP** | : Cassette Lamp |
| **C-I LAMP** | : Cassette Indicator Lamp |
| **DAL** | : Delay-After Loading |
| **DEMOD** | : Demodulator |
| **DET** | : Detector |
| **DL** | : Delay Line |
| **DL-REV** | : Delay Reverse |
| **DL-FWD** | : Delay Forward |
| **DOC** | : Drop Out Compensator |
| **EF** | : Emitter Follower |
| **EMPHA** | : Emphasis |
| **EQ** | : Equalizer |
| **EE** | : Electronic-Electronic |
| **ES** | : End Sensor |
| **FE-H** | : Full Erase Head |
| **FF** | : Flip Flop or Fast Forward |
| **FG** | : Frequency generator |
| **FL-SW** | : Front Loading SW |
| **FLM** | : Front Loading Motor |
| **F/R-SW** | : FF/Rewind Switch |
| **G** | : Ground |
| **HE-1** | : Hall Element-1 |
| **HE-2** | : Hall Element-2 |
| **H-LED** | : Humidity-LED |
| **H-SENS** | : Humidity-Sensor |
| **HPF** | : High-Pass Filter |
| **LIM** | : Limiter |
| **LPF** | : Low-Pass Filter |
| **LM** | : Loading Motor |
| **MDA** | : Motor Drive Amplifier |
| **MC** | : Mechanical Control |
| **MIC** | : Microphone |
| **MOD** | : Modulator |
| **OPE** | : Operation |
| **OSC** | : Oscillator |
| **PB** | : Play Back |
| **PG** | : Pulse Generator |
| **P/R-SW** | : P.B/REC-SW |
| **PCB** | : Printed Circuit Board |
| **PIC** | : Picture Control |
| **REC** | : Recording |
| **REF** | : Reference |
| **RIS** | : Record Inhibit Switch |
| **REW** | : Rewind |
| **REG** | : Regulator |
| **RS** | : Reverse Search |
| **SENS** | : Sensor |
| **SM** | : Supply Motor |
| **S/P** | : Still/Pause |
| **SS** | : Speed Search |
| **STBY** | : Stand By |
| **S & H** | : Sample & Hold |
| **SYNC SEP** | : Sync Separator |
| **TM** | : Take up Motor |
| **T-REC** | : Timer-Recording |
| **T.P** | : Test Point |
| **TR** | : Transistor |
| **TU-P** | : Tuner-Power |
| **UL** | : Unloading |
| **VS** | : Voltage Synthesizer |
| **V.SYNC** | : Vertical Sync |
| **VCO** | : Voltage Controlled Oscillator |
| **VXO** | : Variable Crystal Oscillator |
| **W/D** | : White/Dark |
| **X'OSC** | : Crystal Oscillator |
| **Y/C** | : Luminance/Chrominance |

# CHIP PARTS REPLACEMENT

## CHIP PARTS REPLACEMENT

Some resistors, shorting jumpers (0Ω resistor), ceramic capacitors, transistors and diodes are chip parts which are used for certain circuit elements. When replacing these parts, note the cautions as follows.

**Cautions:**

A. Use fine tipped, well insulated soldering pencil (iron) about 30 watts and the tweezers.
B. Melting the solder, remove the Chip Parts carefully not to tear off the copper foil of the printed circuit board.
C. Discard removed chips; do not reuse them.
D. Do not apply heat for more than 3 seconds to the new chip Parts.
E. Avoid using a rubbing stroke when soldering.
F. Take care not to scratch when soldering, or damage the Chip Parts.
G. Supplementary cementing is not required.

### 1 Removal of chip Parts (Resistors, capacitors, etc.)

A. Grasp the part with tweezers. Melting the solder at both side alternately, remove the one side of the part with a twisting motion.
B. Melt the solder at the other side and remove the part.

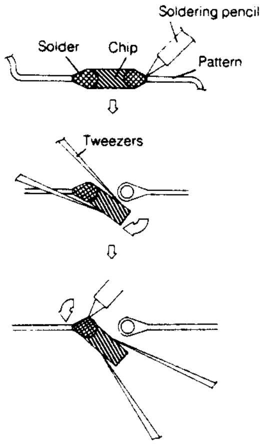

Soldering pencil
Solder
Chip
Pattern
Tweezers

Fig.1

### 2 Removal of Chip Parts (Transistors)

A. Melting the solder of one lead, Lift the side of that lead upward.
B. Simultaneously melt the solder of the two remaining leads and lift the part to remove.

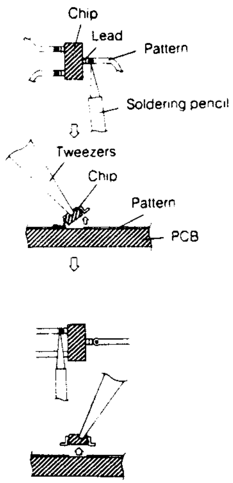

Chip
Lead
Pattern
Soldering pencil
Tweezers
Chip
Pattern
PCB

Fig. 2

### 3 Replacement

A. Presolder the contact points of the circuit pattern.
B. Press the part downward with tweezers and apply the soldering pencil as shown in the figure.

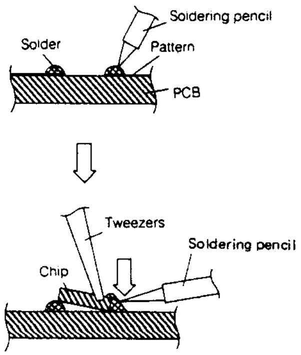
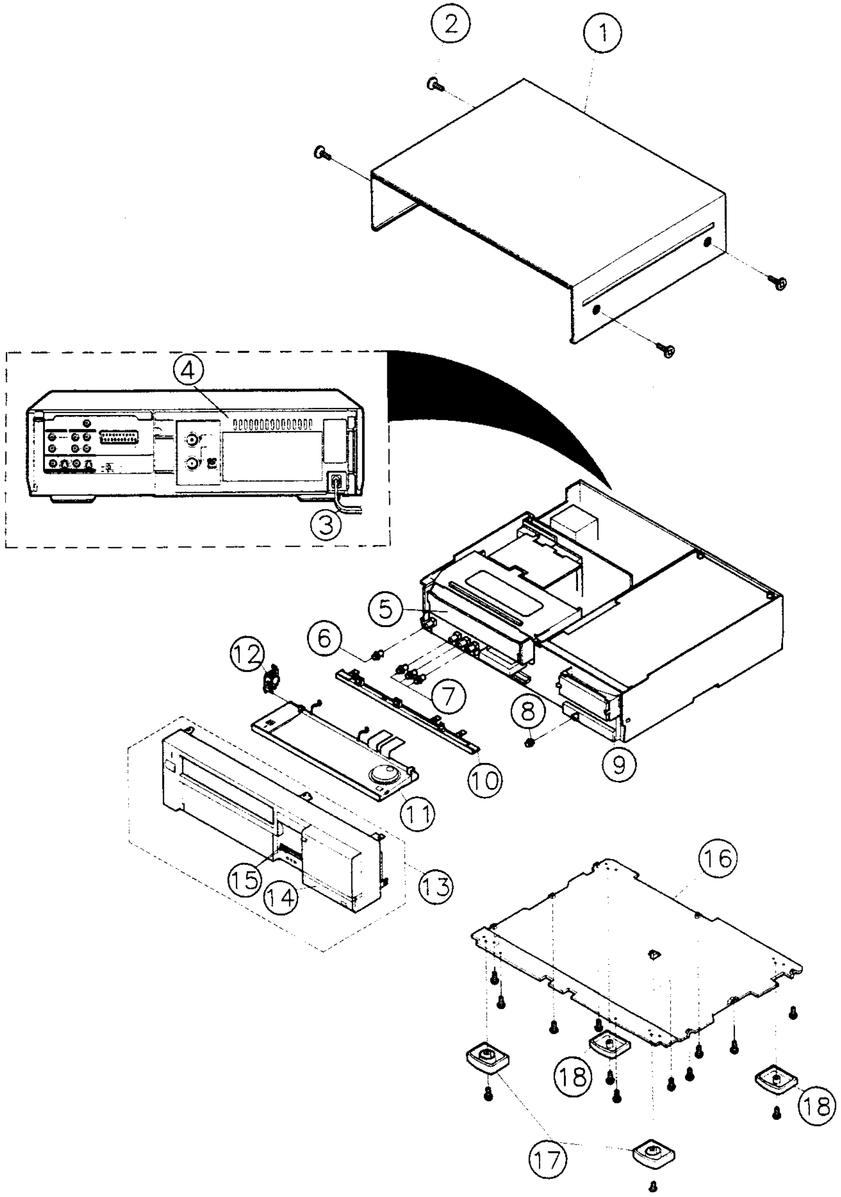

Soldering pencil
Solder
Pattern
PCB
Tweezers
Soldering pencil
Chip

Fig. 3

## — MEMO —

# PARTS LIST

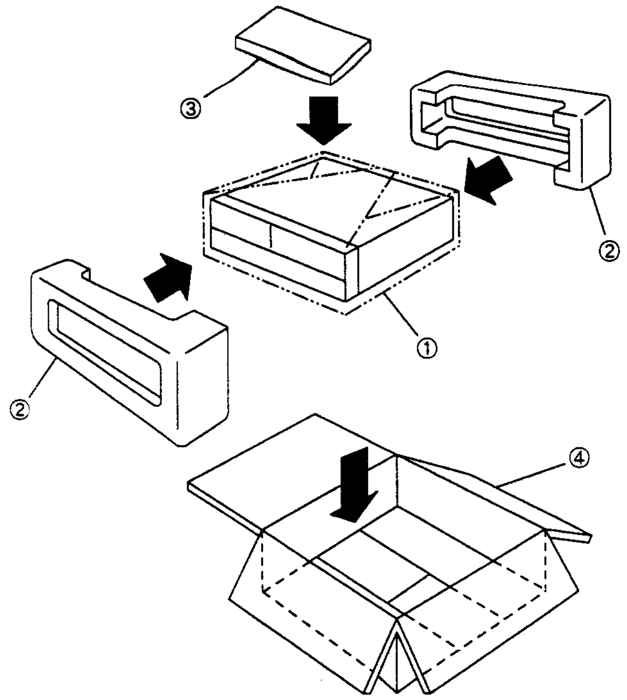
## 1. CABINET PARTS



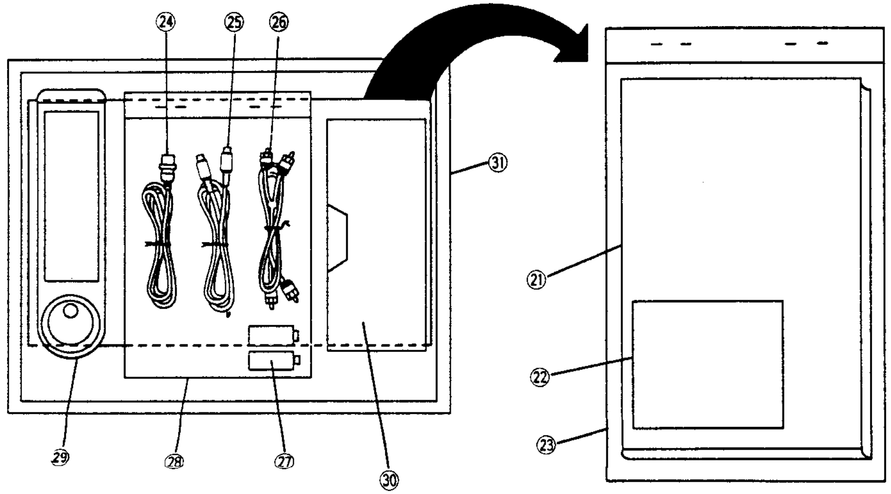
NOTE:
Broken AC power cord must be exchanged with a new original cord.

| ITEM NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| | | CABINET ASSEMBLY | |
| 1 | 968C022050 | TOP COVER ASSY | |
| 2 | 669D223080 | SCREW (10P) | |
| 3 | 246C103020 | AC POWER CORD | [E] |
| 3 | 246C103010 | AC POWER CORD | [IR] |
| 3 | 246C103040 | AC POWER CORD | [NZ] |
| 4 | 641B362030 | BACK COVER | |
| 5 | 702B690060 | F/L DOOR | |
| 6 | 734D482020 | TRACKING KNOB | |
| 7 | 734D482030 | TRACKING KNOB | |
| 8 | 734D428060 | TRACKING KNOB | |
| 9 | 440B104010 | FRONT TERMINAL BOARD | |
| 10 | 761B183010 | LOW PANEL | |
| 11 | 939P337050 | DOOR UNIT | [E] |
| 11 | 939P337040 | DOOR UNIT | [Y] |
| 11 | 939P337030 | DOOR UNIT | [IR] |
| 11 | 939P407010 | DOOR UNIT | [NZ] |
| 12 | 520C026010 | DAMPER UNIT | |
| 13 | 701B195080 | FRONT UNIT | [E] |
| 13 | 701B195040 | FRONT UNIT | [Y] |
| 13 | 701B195090 | FRONT UNIT | [IR, NZ] |
| 14 | 702C890080 | DOOR(R) | [E] |
| 14 | 702C890040 | DOOR(R) | [Y] |
| 14 | 702C890090 | DOOR(R) | [IR, NZ] |
| 15 | 704C655010 | LEVEL KNOB | |
| 16 | 590A273010 | BOTTOM PANEL | |
| 17 | 771C093010 | INSULATOR | |
| 18 | 771C093020 | INSULATOR | |

## 2. PACKING PARTS



### ACCESSORY



| ITEM NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| PACKING PARTS | | | |
| 1 | 831D190010 | PACKING SHEET | |
| 2 | 803A229030 | PACKING CUSHION | |
| 3 | ---------- | ACCESSORY | |
| 4 | 801C041030 | PACKING CASE | [E] |
| 4 | 801C041020 | PACKING CASE | [Y] |
| 4 | 801C041060 | PACKING CASE | [IR] |
| 4 | 801C041070 | PACKING CASE | [NZ] |
| 5 | 831D198030 | PACKING BAG | |
| ACCESSORY | | | |
| 21 | 872C018060 | INSTRUCTION BOOK | [E] |
| 21 | 872C012000 | INSTRUCTION BOOK | [IR] |
| 21 | 872C030080 | INSTRUCTION BOOK | [NZ] |
| 21 | 872C013050 | INSTRUCTION BOOK | [Y] |
| 22 | 851B545010 | SHEET CAUTION DEW | |
| 23 | 831D181020 | PACKING BAG | |
| 24 | 242D231030 | CABLE | RF CABLE |
| 25 | 242D335010 | CABLE | S-CABLE |
| 26 | 242C938010 | CABLE(2P) | AUDIO CABLE |
| 27 | ---------- | BATTERY | |
| 28 | 831D110080 | PACKING BAG | |
| 29 | 939P379010 | REMOTE HAND UNIT | [E, IR, Y] |
| 29 | 939P379020 | REMOTE HAND UNIT | [NZ] |
| 30 | ---------- | CASSETTE TAPE | |
| 31 | 851B824020 | DECLARATION SHEET | [E] |
| 32 | 829C037010 | BOX ACCESSORY | |

## 3. ELECTRICAL PARTS

(MODEL MARK) [A] : E82A [E] : E82 [G] : E82G [IR] : E82IR [NZ] : E82NZ [Y] : E82Y

### INTEGRATED CIRCUITS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| IC101 | 266P192010 | IC | LA7910 |
| IC161 | 272P270010 | IC | LA7212 |
| IC200 | 272P265010 | IC | BA7021 |
| IC201 | 272P325020 | IC | NJM2235S (INT) |
| IC201 | 272P392010 | IC | AN3334K (H. AMP) |
| IC202 | 272P390010 | IC | BA7604 |
| IC203 | 266P016010 | IC | LA7016 |
| IC210 | 272P151010 | IC | NJM2217L |
| IC213 | 272P265010 | IC | BA7021 |
| IC214 | 267P032010 | IC | AMP2(B078-1) |
| IC215 | 272P390010 | IC | BA7604 |
| IC216 | 272P390010 | IC | BA7604 |
| IC217 | 266P016010 | IC | LA7016 |
| IC2A0 | 272P474020 | IC | M52084FP |
| IC2A1 | 272P317020 | IC | M52054FP |
| IC2A2 | 272P390010 | IC | BA7604 |
| IC2A3 | 272P390010 | IC | BA7604 |
| IC2A4 | 266P620010 | IC | AN608P |
| IC2A5 | 272P518010 | IC | MN3815 |
| IC2A6 | 263P653030 | IC | MC14053BF |
| IC2A7 | 267P034010 | IC | EMP2(B079-1) |
| IC2A8 | 272P079010 | IC | NJM2902M |
| IC2000 | 272P565010 | IC | TL8812F |
| IC2001 | 266P063020 | IC | BA7022A |
| IC2002 | 272P517010 | IC | NJM2228M |
| IC301 | 272P060010 | IC | BA7252S |
| IC3A0 | 272P234010 | IC | LA7295 |
| IC3A1 | 272P200020 | IC | M5201L |
| IC3303 | 272P376030 | IC | XRA15218N |
| IC3304 | 272P488010 | IC | BA7703K1 |
| IC3306 | 267P014020 | IC | DTR(B061-2) |
| IC3307 | 267P097010 | IC | KIC-LR-CONT(B118-1) |
| IC3310 | 266P286010 | IC | TK15022Z |
| IC3311 | 266P286010 | IC | TK15022Z |
| IC3312 | 266P016010 | IC | LA7016 |
| IC3313 | 266P016010 | IC | LA7016 |
| IC4A0 | 263P194020 | IC | BU2821S |
| IC4A1 | 272P237010 | IC | LA6324N |
| IC4A2 | 272P235010 | IC | TA7291S |
| IC4A3 | 263P066020 | IC | TC4066BP |
| IC501 | 263P610010 | IC | M50455-090SP |
| IC5A0 | 263P333010 | IC | M37420M6-251SP |
| IC5A1 | 263P334010 | IC | M50927-224SP |
| IC5A2 | 263P077020 | IC | TC4077BP |
| IC5A3 | 263P053020 | IC | TC4053BP |
| IC5A4 | 263P011020 | IC | TC4011BP |
| IC5A5 | 272P265010 | IC | BA7021 [G] |
| IC5Z0 | 263P192010 | IC | M50927-222SP |
| IC6A0 | 266P016010 | IC | LA7016 |
| IC6A1 | 263P335010 | IC | MC14013BF |
| IC6C1 | 272P231020 | IC | HA118054FP |
| IC6C3 | 272P439010 | IC | M52077P |
| IC6C4 | 272P516010 | IC | M52059AFP |
| IC6C5 | 272P277010 | IC | BA7025L [E, G, Y] |
| IC6C7 | 272P390010 | IC | BA7604 |
| IC6001 | 272P520010 | IC | M52093SP |
| IC700 | 267P032010 | IC | AMP2(B078-1) |
| IC702 | 272P518010 | IC | MN3815 |
| IC703 | 272P518010 | IC | MN3815 |
| IC704 | 272P512010 | IC | MN3109S |
| IC705 | 272P439010 | IC | M52077P |
| IC706 | 267P028050 | IC | KIC-SUB(B075-5) |
| IC710 | 267P049010 | IC | SYNC-P(B090-1) |
| IC7A0 | 266P982010 | IC | AN608P [E, IR, NZ] |
| IC7A0 | 272P219010 | IC | TDA2555 [A, G, Y] |
| IC7A1 | 266P982010 | IC | AN608P [E, IR, NZ] |
| IC7A1 | 272P218010 | IC | TDA3803A [A, G, Y] |
| IC7A2 | 272P283010 | IC | TA8662N [E, IR, NZ] |
| IC7A3 | 263P636010 | IC | TC6011N [E, IR, NZ] |
| IC7A4 | 263P622020 | IC | HM6264ALSP10 [E, IR, NZ] |
| IC7A6 | 272P284010 | IC | TD6710AN [E, IR, NZ] |
| IC7A7 | 263P011020 | IC | TC4011BP [E, IR, NZ] |
| IC7B0 | 267P036010 | IC | AFL87F-14000A10 [E, IR, NZ] |
| IC7B1 | 267P036010 | IC | AFL87F-14000A10 [E, IR, NZ] |
| IC7B4 | 267P099010 | IC | KIC-NICAM(B120-1) [IR] |
| IC7B4 | 267P099020 | IC | KIC-NICAM(B120-2) [E, NZ] |
| IC7C0 | 266P982010 | IC | AN608P [IR] |
| IC7Y1 | 272P026010 | IC | M51366SP [E, NZ] |
| IC7Y2 | 272P098010 | IC | KIC-TUNER(B119-1) [E, NZ] |
| IC801 | 263P450010 | IC | μPD75217GF-523 [G] |
| IC801 | 263P451010 | IC | μPD75217GF-522 [A, E, IR, NZ, Y] |
| IC802 | 272P064010 | IC | M58630P (TIMER) |
| IC802 | 263P345010 | IC | μPD7554ACS-024 (VPS) [G] |
| IC803 | 263P118010 | IC | μPD7554G-622 (TIMER) |
| IC803 | 263P631010 | IC | SDA5642 (VPS) [G] |
| IC902 | 266P010020 | IC | μPC574J-K |
| IC960 | 267P008010 | IC | STK5472 |

### TRANSISTORS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 105 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 106 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 107 | 260P817030 | CHIP TRANSISTOR | 2SA1037K |
| Q 200 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 201 | 260P562040 | TRANSISTOR | 2SA952-K (INT) |
| Q 201 | 260P807010 | CHIP TRANSISTOR | DTC124K (H. AMP) |
| Q 202 | 260P807010 | CHIP TRANSISTOR | DTC124K (H. AMP) |
| Q 202 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R (INT) |
| Q 203 | 260P562040 | TRANSISTOR | 2SA952-K (INT) |
| Q 203 | 260P807010 | CHIP TRANSISTOR | DTC124K (H. AMP) |
| Q 204 | 260P807010 | CHIP TRANSISTOR | DTC124K (H. AMP) |
| Q 204 | 260P872020 | CHIP TRANSISTOR | DTC124EU (INT) |
| Q 205 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 206 | 260P562040 | TRANSISTOR | 2SA952-K (INT) |
| Q 206 | 260P806010 | CHIP TRANSISTOR | DTA124EK (H. AMP) |
| Q 207 | 260P835030 | CHIP TRANSISTOR | 2SC2413K (H. AMP) |
| Q 207 | 260P855050 | CHIP TRANSISTOR | 2SC4081 (INT) |
| Q 208 | 260P835030 | CHIP TRANSISTOR | 2SC2413K (H. AMP) |
| Q 208 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R (INT) |
| Q 209 | 260P835030 | CHIP TRANSISTOR | 2SC2413K (H. AMP) |
| Q 209 | 260P872020 | CHIP TRANSISTOR | DTC124EU (INT) |
| Q 210 | 260P835030 | CHIP TRANSISTOR | 2SC2413K (H. AMP) |
| Q 210 | 260P871020 | CHIP TRANSISTOR | DTA124EU (INT) |
| Q 211 | 260P835030 | CHIP TRANSISTOR | 2SC2413K |
| Q 212 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 213 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 214 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 215 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 216 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2A0 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2A1 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2A2 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2A3 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2A4 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2A5 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2A6 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2A7 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2A8 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2A9 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2B1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2B2 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2B3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2B4 | 260P872020 | CHIP TRANSISTOR | DTC124EU [A, E, IR, NZ, Y] |
| Q 2B5 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2B6 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 2B7 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 2B8 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2C0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2C1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2C3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2C4 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2C5 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2C9 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2D0 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2D1 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2D2 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2D3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2D4 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2D5 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2D6 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2D7 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2D8 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2D9 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2E0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2E1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2E2 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2E3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2E4 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2E5 | 260P562040 | TRANSISTOR | 2SA952-K |
| Q 2E6 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2E7 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2E8 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 2E9 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2F1 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2F2 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 2F3 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2F4 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2F5 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2F6 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2F7 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2F8 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2F9 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2G0 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 2G1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2G2 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2G4 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2G5 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2G6 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2G7 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2G8 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 2G9 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2H0 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 2H1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2H2 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2H3 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2H5 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2H6 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2H8 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2J0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J2 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J4 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2J5 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 2J6 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J7 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J8 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2J9 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2K0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2K1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2K3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2K4 | 260P562040 | TRANSISTOR | 2SA952-K |
| Q 2L0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 2001 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2002 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 2003 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 2004 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 301 | 260P255040 | TRANSISTOR | 2SA950-Y |
| Q 302 | 260P416030 | TRANSISTOR | 2SC2274-F |
| Q 303 | 260P835030 | CHIP TRANSISTOR | 2SC2413K |
| Q 304 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 305 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 306 | 260P835030 | CHIP TRANSISTOR | 2SC2413K |
| Q 307 | 260P835030 | CHIP TRANSISTOR | 2SC2413K |
| Q 308 | 260P387030 | TRANSISTOR | 2SC2236-Y |
| Q 3A0 | 260P629060 | TRANSISTOR | 2SC3331-S, T, U |
| Q 3A1 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3A2 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3A3 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 3Z0 | 260P836020 | CHIP TRANSISTOR | 2SC3326-B [G] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 3Z0 | 260P522010 | TRANSISTOR | 2SC3068 [A, E, IR, NZ, Y] |
| Q 3Z1 | 260P836020 | CHIP TRANSISTOR | 2SC3326-B [G] |
| Q 3Z1 | 260P522010 | TRANSISTOR | 2SC3068 [A, E, IR, NZ, Y] |
| Q 3300 | 260P387030 | TRANSISTOR | 2SC2236-Y |
| Q 3307 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 3308 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3310 | 260P817030 | CHIP TRANSISTOR | 2SA1037K |
| Q 3313 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 3321 | 260P817030 | CHIP TRANSISTOR | 2SA1037K |
| Q 3330 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3331 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3332 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3400 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3401 | 260P818030 | CHIP TRANSISTOR | 2SC2412K |
| Q 3408 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 3409 | 260P807010 | CHIP TRANSISTOR | DTC124K |
| Q 3500 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 4A1 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 4A2 | 260P559060 | TRANSISTOR | 2SC1740S-S, E |
| Q 4A3 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 4A5 | 260P459010 | TRANSISTOR | 2SK381-A |
| Q 4A8 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 4B0 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 4B1 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 4B2 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 4B3 | 260P586050 | TRANSISTOR | 2SB892-T, U |
| Q 4B4 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 4B5 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 4B6 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 4B7 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 4B8 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 4B9 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 4C0 | 260P459010 | TRANSISTOR | 2SK381-A |
| Q 4C1 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 501 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 502 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 507 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 571 | 268P014020 | PHOTO TRANSISTOR | PN205L-(NC) |
| Q 572 | 268P014020 | PHOTO TRANSISTOR | PN205L-(NC) |
| Q 573 | 268P044010 | PHOTO INTERRUPTER | ON2270-R |
| Q 574 | 268P044010 | PHOTO INTERRUPTER | ON2270-R |
| Q 575 | 268P045010 | PHOTO INTERRUPTER | GP1L52 |
| Q 5A0 | 260P338050 | TRANSISTOR | 2SC2603-G |
| Q 5A1 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5A2 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5A3 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5A4 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5A5 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5A6 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5A7 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5A8 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5A9 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5B0 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5B1 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5B2 | 260P632010 | TRANSISTOR | DTC124ES |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 5B3 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5B4 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5B6 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5B7 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5B8 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5B9 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5C0 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5C1 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5C2 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5C3 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5C4 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5C5 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5C6 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5C7 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5C8 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5C9 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5D0 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5D1 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5D2 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5D3 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5D4 | 260P255040 | TRANSISTOR | 2SA950-Y |
| Q 5D5 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5D6 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5D7 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5D8 | 260P562040 | TRANSISTOR | 2SA952-K |
| Q 5D9 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5E1 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5E2 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5E3 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 5E4 | 260P255040 | TRANSISTOR | 2SA950-Y [A, NZ] |
| Q 5E5 | 260P560040 | TRANSISTOR | 2SA933S-S |
| Q 5E9 | 260P654020 | TRANSISTOR | 2SC2058S-P |
| Q 5F0 | 260P654020 | TRANSISTOR | 2SC2058S-P |
| Q 5F1 | 260P438020 | TRANSISTOR | 2SD1273, P M21C |
| Q 5F2 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5F3 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5F4 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 5F5 | 260P560040 | TRANSISTOR | 2SA933S-S [G] |
| Q 5G0 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 5G1 | 260P603010 | TRANSISTOR | DTA124ES/UN4112 |
| Q 6A0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6A1 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6C0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6C2 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6C3 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6C4 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 6C6 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 6D1 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6D2 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6D3 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 6D5 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6D6 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6D7 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6D8 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6D9 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 6E0 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6E1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6E3 | 260P872020 | CHIP TRANSISTOR | DTC124EU [E, G, Y] |
| Q 6E4 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6E5 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6F0 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6S0 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 6S1 | 260P840020 | CHIP TRANSISTOR | 2SA1530-R |
| Q 6S2 | 260P804020 | CHIP TRANSISTOR | 2SC3052-F |
| Q 6T0 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 6T1 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6Z0 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6Z1 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6Z2 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6Z3 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 6Z4 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6000 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6001 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6002 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6004 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6005 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6006 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6007 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6008 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6009 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6011 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6012 | 260P844010 | CHIP TRANSISTOR | FMW1 |
| Q 6013 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6015 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6017 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6020 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6021 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 6034 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 6035 | 260P871020 | CHIP TRANSISTOR | DTA124EU |
| Q 700 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 701 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 702 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 703 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 704 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 705 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 706 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 707 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 708 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 709 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 710 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 711 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 712 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 713 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 714 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 715 | 260P872020 | CHIP TRANSISTOR | DTC124EU |
| Q 716 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 717 | 260P855050 | CHIP TRANSISTOR | 2SC4081 |
| Q 718 | 260P859050 | CHIP TRANSISTOR | 2SA1576-R |
| Q 7A0 | 260P818030 | CHIP TRANSISTOR | 2SC2412K [E, IR, NZ] |
| Q 7A0 | 260P818080 | CHIP TRANSISTOR | 2SC2412K-R [A, G, Y] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| Q 7A1 | 260P818080 | CHIP TRANSISTOR | 2SC2412K-R |
| Q 7A2 | 260P818080 | CHIP TRANSISTOR | 2SC2412K-R [A, G, Y] |
| Q 7A3 | 260P818080 | CHIP TRANSISTOR | 2SC2412K-R [A, G, Y] |
| Q 7A5 | 260P807010 | CHIP TRANSISTOR | DTC124K [A, G, Y] |
| Q 7A6 | 260P818080 | CHIP TRANSISTOR | 2SC2412K-R [A, G, Y] |
| Q 7A7 | 260P818080 | CHIP TRANSISTOR | 2SC2412K-R [A, G, Y] |
| Q 7A8 | 260P836020 | CHIP TRANSISTOR | 2SC3326-B [A, G, Y] |
| Q 7A9 | 260P806010 | CHIP TRANSISTOR | DTA124EK [A, G, Y] |
| Q 7Y3 | 260P387030 | TRANSISTOR | 2SC2236-Y [E, NZ] |
| Q 7Y4 | 260P817030 | CHIP TRANSISTOR | 2SA1037K [E, NZ] |
| Q 801 | 260P632010 | TRANSISTOR | DTC124ES [G] |
| Q 802 | 260P559050 | TRANSISTOR | 2SC1740S-E |
| Q 803 | 260P559030 | TRANSISTOR | 2SC1740S |
| Q 804 | 260P560040 | TRANSISTOR | 2SA933S-S [G] |
| Q 901 | 260P585010 | TRANSISTOR | 2SD1682-R, S |
| Q 903 | 260P255040 | TRANSISTOR | 2SA950-Y |
| Q 904 | 260P586050 | TRANSISTOR | 2SB892-T, U |
| Q 906 | 260P585010 | TRANSISTOR | 2SD1682-R, S |
| Q 907 | 260P438020 | TRANSISTOR | 2SD1273-P |
| Q 908 | 260P632010 | TRANSISTOR | DTC124ES |
| Q 971 | 260P438010 | TRANSISTOR | 2SD1273-Q |

## DIODES

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| D 101 | 264P568010 | DIODE | 1SS252 |
| D 102 | 264P568010 | DIODE | 1SS252 |
| D 103 | 264P568010 | DIODE | 1SS252 |
| D 104 | 264P808010 | CHIP DIODE | DAN202K |
| D 200 | 264P828010 | CHIP DIODE | DAN202U |
| D 201 | 264P822010 | CHIP DIODE | HSM2838 |
| D 202 | 264P828010 | CHIP DIODE | DAN202U |
| D 203 | 264P828010 | CHIP DIODE | DAN202U |
| D 204 | 264P828010 | CHIP DIODE | DAN202U |
| D 205 | 264P814010 | CHIP DIODE | DAP202U |
| D 2A0 | 264P828010 | CHIP DIODE | DAN202U |
| D 2A2 | 264P814010 | CHIP DIODE | DAP202U |
| D 2A4 | 264P814010 | CHIP DIODE | DAP202U |
| D 2A5 | 264P814010 | CHIP DIODE | DAP202U |
| D 2A7 | 264P814010 | CHIP DIODE | DAP202U |
| D 2B0 | 264P814010 | CHIP DIODE | DAP202U |
| D 2B2 | 264P123030 | DIODE | 1SS99 |
| D 2B3 | 264P814010 | CHIP DIODE | DAP202U |
| D 2B4 | 264P814010 | CHIP DIODE | DAP202U |
| D 2B5 | 264P828010 | CHIP DIODE | DAN202U |
| D 2B6 | 264P814010 | CHIP DIODE | DAP202U |
| D 2B8 | 264P828010 | CHIP DIODE | DAN202U |
| D 2C1 | 264P828010 | CHIP DIODE | DAN202U |
| D 2C2 | 264P828010 | CHIP DIODE | DAN202U |
| D 301 | 264P341020 | DIODE | HZ11A1 |
| D 302 | 264P515010 | DIODE | MA165 |
| D 3A0 | 264P808010 | CHIP DIODE | DAN202K |
| D 3A1 | 264P808010 | CHIP DIODE | DAN202K |
| D 3300 | 264P341020 | DIODE | HZ11A1 |
| D 3320 | 264P808010 | CHIP DIODE | DAN202K |
| D 3321 | 264P808010 | CHIP DIODE | DAN202K |
| D 3323 | 264P515010 | DIODE | MA165 [E, IR, NZ] |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| D 4A1 | 264P515010 | DIODE | MA165 |
| D 4A3 | 264P500020 | DIODE | EM01Z |
| D 4A5 | 264P515010 | DIODE | MA165 |
| D 4A6 | 264P515010 | DIODE | MA165 |
| D 4B0 | 264P515010 | DIODE | MA165 |
| D 4B1 | 264P515010 | DIODE | MA165 |
| D 4B2 | 264P515010 | DIODE | MA165 |
| D 4B3 | 264P515010 | DIODE | MA165 |
| D 501 | 264P515010 | DIODE | MA165 |
| D 502 | 264P515010 | DIODE | MA165 |
| D 570 | 264P307020 | LIGHT EMITTING DIODE | GL-451 |
| D 571 | 264P515010 | DIODE | MA165 |
| D 5A0 | 264P515010 | DIODE | MA165 |
| D 5A1 | 264P515010 | DIODE | MA165 |
| D 5A2 | 264P515010 | DIODE | MA165 |
| D 5A3 | 264P515010 | DIODE | MA165 |
| D 5A4 | 264P515010 | DIODE | MA165 |
| D 5A5 | 264P515010 | DIODE | MA165 |
| D 5A6 | 264P515010 | DIODE | MA165 |
| D 5A7 | 264P515010 | DIODE | MA165 |
| D 5A8 | 264P515010 | DIODE | MA165 |
| D 5A9 | 264P515010 | DIODE | MA165 |
| D 5B0 | 264P515010 | DIODE | MA165 |
| D 5B1 | 264P515010 | DIODE | MA165 |
| D 5B2 | 264P515010 | DIODE | MA165 |
| D 5B3 | 264P515010 | DIODE | MA165 |
| D 5B4 | 264P501040 | DIODE | HZ3ALL |
| D 5B5 | 264P515010 | DIODE | MA165 |
| D 5B6 | 264P342070 | DIODE | HZ4C2 |
| D 5B7 | 264P484040 | DIODE | RD5. 6FB3 |
| D 5B8 | 264P515010 | DIODE | MA165 |
| D 5B9 | 264P515010 | DIODE | MA165 |
| D 5C0 | 264P515010 | DIODE | MA165 |
| D 5C1 | 264P515010 | DIODE | MA165 |
| D 5C2 | 264P515010 | DIODE | MA165 |
| D 5C3 | 264P515010 | DIODE | MA165 |
| D 5C4 | 264P515010 | DIODE | MA165 |
| D 5C5 | 264P515010 | DIODE | MA165 |
| D 5C6 | 264P515010 | DIODE | MA165 |
| D 5C7 | 264P515010 | DIODE | MA165 |
| D 5C8 | 264P515010 | DIODE | MA165 |
| D 5C9 | 264P515010 | DIODE | MA165 |
| D 5D0 | 264P515010 | DIODE | MA165 |
| D 5D1 | 264P515010 | DIODE | MA165 |
| D 5D2 | 264P515010 | DIODE | MA165 |
| D 5D3 | 264P515010 | DIODE | MA165 |
| D 5D4 | 264P515010 | DIODE | MA165 |
| D 5D5 | 264P515010 | DIODE | MA165 |
| D 5D6 | 264P515010 | DIODE | MA165 |
| D 5D7 | 264P515010 | DIODE | MA165 |
| D 5D8 | 264P515010 | DIODE | MA165 |
| D 5D9 | 264P592010 | DIODE | HZ18-2L |
| D 5E0 | 264P515010 | DIODE | MA165 |
| D 5E1 | 264P515010 | DIODE | MA165 |
| D 5E2 | 264P515010 | DIODE | MA165 |
| D 5E3 | 264P515010 | DIODE | MA165 |
| D 5E4 | 264P515010 | DIODE | MA165 |
| D 5E5 | 264P515010 | DIODE | MA165 [G] |
| D 5E6 | 264P515010 | DIODE | MA165 [G] |
| D 6A0 | 264P828010 | CHIP DIODE | DAN202U |
| D 6A1 | 264P828010 | CHIP DIODE | DAN202U |
| D 6C0 | 264P828010 | CHIP DIODE | DAN202U |
| D 6C1 | 264P828010 | CHIP DIODE | DAN202U |
| D 6C2 | 264P814010 | CHIP DIODE | DAP202U |
| D 6C3 | 264P123030 | DIODE | 1SS99 [E, G, Y] |
| D 6C6 | 264P828010 | CHIP DIODE | DAN202U |
| D 6C7 | 264P828010 | CHIP DIODE | DAN202U |
| D 6C8 | 264P828010 | CHIP DIODE | DAN202U |
| D 6C9 | 264P515010 | DIODE | MA165 |
| D 6T0 | 264P828010 | CHIP DIODE | DAN202U |
| D 6000 | 264P814010 | CHIP DIODE | DAP202U |
| D 6001 | 264P828010 | CHIP DIODE | DAN202U |
| D 6002 | 264P828010 | CHIP DIODE | DAN202U |
| D 6003 | 264P828010 | CHIP DIODE | DAN202U |
| D 6004 | 264P828010 | CHIP DIODE | DAN202U |
| D 6005 | 264P828010 | CHIP DIODE | DAN202U |
| D 700 | 264P830020 | CHIP DIODE | DA204U |
| D 701 | 264P830020 | CHIP DIODE | DA204U |
| D 7A0 | 264P486080 | DIODE | RD10FB1 [E, IR, NZ] |
| D 7A0 | 264P808010 | CHIP DIODE | DAN202K [A, G, Y] |
| D 7A1 | 264P808010 | CHIP DIODE | DAN202K |
| D 7A2 | 264P808010 | CHIP DIODE | DAN202K |
| D 7A5 | 264P808010 | CHIP DIODE | DAN202K |
| D 7A6 | 264P808010 | CHIP DIODE | DAN202K |
| D 7A8 | 264P808010 | CHIP DIODE | DAN202K |
| D 7Y1 | 264P487010 | DIODE | RD10FB3 [E, NZ] |
| D 801 | 264P486080 | DIODE | RD10FB1 (TIMER) |
| D 801 | 264P515010 | DIODE | MA165 (VPS) [G] |
| D 802 | 264P568010 | DIODE | 1SS252 |
| D 803 | 264P193080 | DIODE | MZ309B2/HZ9B24 |
| D 804 | 264P568010 | DIODE | 1SS252 |
| D 805 | 264P568010 | DIODE | 1SS252 |
| D 806 | 264P568010 | DIODE | 1SS252 |
| D 809 | 264P568010 | DIODE | 1SS252 |
| D 810 | 264P568010 | DIODE | 1SS252 |
| D 811 | 264P568010 | DIODE | 1SS252 |
| D 812 | 264P568010 | DIODE | 1SS252 |
| D 813 | 264P568010 | DIODE | 1SS252 |
| D 814 | 264P568010 | DIODE | 1SS252 |
| D 815 | 264P568010 | DIODE | 1SS252 |
| D 816 | 264P568010 | DIODE | 1SS252 |
| D 817 | 264P568010 | DIODE | 1SS252 |
| D 818 | 264P568010 | DIODE | 1SS252 |
| D 819 | 264P568010 | DIODE | 1SS252 |
| D 820 | 264P568010 | DIODE | 1SS252 |
| D 821 | 264P568010 | DIODE | 1SS252 |
| D 822 | 264P568010 | DIODE | 1SS252 |
| D 823 | 264P568010 | DIODE | 1SS252 |
| D 824 | 264P568010 | DIODE | 1SS252 |
| D 825 | 264P568010 | DIODE | 1SS252 |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| D 834 | 264P341070 | DIODE | HZ6C2 |
| D 841 | 264P313040 | DIODE | SLR-34MC3 |
| D 842 | 264P313040 | DIODE | SLR-34MC3 |
| D 843 | 264P313040 | DIODE | SLR-34MC3 |
| D 844 | 264P568010 | DIODE | 1SS252 |
| D 847 | 264P568010 | DIODE | 1SS252 |
| D 848 | 264P568010 | DIODE | 1SS252 |
| D 850 | 299P111030 | LEVEL METER UNIT | LI-2261E |
| D 8A0 | 264P313050 | DIODE | SLR-34URC3 |
| D 8A1 | 264P313050 | DIODE | SLR-34URC3 |
| D 8A3 | 264P568010 | DIODE | 1SS252 [E] |
| D 8A4 | 264P568010 | DIODE | 1SS252 |
| D 8A6 | 264P568010 | DIODE | 1SS252 |
| D 8A7 | 264P568010 | DIODE | 1SS252 [IR] |
| D 8A8 | 264P568010 | DIODE | 1SS252 |
| D 8A9 | 264P568010 | DIODE | 1SS252 |
| D 8B0 | 264P313040 | DIODE | SLR-34MC3 (JACK-F) |
| D 8B0 | 264P568010 | DIODE | 1SS252 (TIMER) |
| D 8B1 | 264P313040 | DIODE | SLR-34MC3 |
| D 8B2 | 264P313060 | LIGHT EMITTING DIODE | SLR-34DC3 |
| D 8B3 | 264P313040 | DIODE | SLR-34MC3 |
| D 8B4 | 264P313050 | DIODE | SLR-34URC3 |
| D 8B5 | 264P313050 | DIODE | SLR-34URC3 |
| D 8B6 | 264P313040 | DIODE | SLR-34MC3 [E, IR, NZ] |
| D 8B7 | 264P313060 | LIGHT EMITTING DIODE | SLR-34DC3 [E, G, Y] |
| D 901 | 264P430030 | DIODE | DSA3A1 (17M FORMING) |
| D 902 | 264P430030 | DIODE | DSA3A1 (17M FORMING) |
| D 905 | 264P301010 | DIODE | 1SS82 (TP) |
| D 906 | 264P301010 | DIODE | 1SS82 (TP) |
| D 907 | 264P301010 | DIODE | 1SS82 (TP) |
| D 909 | 264P461040 | DIODE | EQA02-06A |
| D 911 | 264P341020 | DIODE | HZ11A1 |
| D 914 | 264P342030 | DIODE | HZ30-3 |
| D 915 | 264P461040 | DIODE | EQA02-06A |
| D 916 | 264P045040 | DIODE | 1S2471 |
| D 917 | 264P045040 | DIODE | 1S2471 |
| D 918 | 264P500020 | DIODE | EM01Z |
| D 919 | 264P500020 | DIODE | EM01Z |
| D 920 | 264P500020 | DIODE | EM01Z |
| D 921 | 264P500020 | DIODE | EM01Z |
| D 960 | 264P045040 | DIODE | 1S2471 |
| D 970 | 264P536010 | DIODE | RBV-402 |
| D 971 | 264P536010 | DIODE | RBV-402 |

## FILTERS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| BF3301 | 409P356010 | BAND PASS FILTER | |
| BF3302 | 409P371010 | BAND PASS FILTER | |
| BF6000 | 409P649010 | BAND PASS FILTER | |
| BPF201 | 409P455010 | BAND PASS FILTER | |
| BPF2A0 | 409P455010 | BAND PASS FILTER | |
| BPF2A1 | 409P611010 | BAND PASS FILTER | |
| BPF6C0 | 409P540010 | BAND PASS FILTER | |
| BPF6C1 | 409P460010 | BAND PASS FILTER | |
| BPF700 | 409P623010 | BAND PASS FILTER | |
| BPF701 | 409P623010 | BAND PASS FILTER | |
| BPF702 | 409P656010 | BAND PASS FILTER | |
| BPF7A0 | 409P453010 | BAND PASS FILTER | [IR] |
| BPF7A0 | 409P453020 | BAND PASS FILTER | [E, NZ] |
| CF161 | 299P034030 | CERAMIC RESONATOR | |
| CF5A0 | 299P118020 | CERAMIC RESONATOR | CST8. 00MT |
| CF5A1 | 299P116010 | CERAMIC RESONATOR | KBR-4. 0MES |
| CF5Z0 | 299P116010 | CERAMIC RESONATOR | KBR-4. 0MES |
| CF6C0 | 296P098010 | CERAMIC FILTER | [E, G, Y] |
| CF7A0 | 296P014020 | CERAMIC FILTER | SFE-5. 5MA [A, G, Y] |
| CF7A1 | 296P014050 | CERAMIC FILTER | [A, G, Y] |
| DL6C1 | 337P160010 | COMB FILTER | EFD-VR645A45H |
| LF6000 | 409P609010 | LOW PASS FILTER | |
| LPF201 | 409P444010 | LOW PASS FILTER | |
| LPF2A0 | 409P608010 | LOW PASS FILTER | |
| LPF2A1 | 409P444010 | LOW PASS FILTER | |
| LPF2A2 | 409P466020 | LOW PASS FILTER | |
| LPF2A3 | 409P372010 | LOW PASS FILTER | |
| LPF3Z0 | 409P454010 | LOW PASS FILTER | [G] |
| LPF3Z1 | 409P454010 | LOW PASS FILTER | [G] |
| LPF6C0 | 409P612010 | LOW PASS FILTER | |
| LPF6C1 | 409P386010 | BAND PASS FILTER | SBP-4245 |
| LPF700 | 409P654010 | LOW PASS FILTER | |
| LPF701 | 409P608010 | LOW PASS FILTER | |
| LPF702 | 409P608010 | LOW PASS FILTER | |
| SF7Y1 | 296P112010 | SAW FILTER | SAF33. 0MDA70Z [E, NZ] |

## DELAY LINES

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| DF2A0 | 409P629010 | DELAY EQUALIZER | |
| DF2A1 | 409P610010 | DELAY EQUALIZER | |
| DF700 | 409P431010 | DELAY EQUALIZER | |
| DL6C0 | 337P130010 | DELAY LINE | |
| DL6C1 | 337P160010 | DELAY LINE | |
| DL6C2 | 337P164010 | DELAY LINE | |
| DL6C3 | 337P164010 | DELAY LINE | |
| DL700 | 337P164010 | DELAY LINE | |

## COILS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| L 201 | 325C242050 | CHIP COIL | 100μH-K (INT) |
| L 201 | 325C262050 | PEAKING COIL | 100μH-K (H. AMP) |
| L 202 | 325C242050 | CHIP COIL | 100μH-K (INT) |
| L 202 | 325C262050 | PEAKING COIL | 100μH-K (H. AMP) |
| L 203 | 325C242050 | CHIP COIL | 100μH-K (INT) |
| L 203 | 325C262050 | PEAKING COIL | 100μH-K (H. AMP) |
| L 204 | 325C242050 | CHIP COIL | 100μH-K (INT) |
| L 204 | 325C262050 | PEAKING COIL | 100μH-K (H. AMP) |
| L 205 | 325C242050 | CHIP COIL | 100μH-K |
| L 206 | 325C242050 | CHIP COIL | 100μH-K |
| L 207 | 325C242050 | CHIP COIL | 100μH-K |
| L 208 | 325C242050 | CHIP COIL | 100μH-K |
| L 209 | 325C242050 | CHIP COIL | 100μH-K |
| L 210 | 325C242050 | CHIP COIL | 100μH-K |
| L 211 | 325C242050 | CHIP COIL | 100μH-K |
| L 212 | 325C242050 | CHIP COIL | 100μH-K |
| L 213 | 325C106030 | PEAKING COIL | 10μH-J |
| L 214 | 325C242050 | CHIP COIL | 100μH-K |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| L 2A0 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2A1 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2A2 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2A3 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 2A4 | 325C107010 | PEAKING COIL | 47μH-J | |
| L 2A5 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 2A6 | 325C166020 | PEAKING COIL | 8.2MHJ | |
| L 2A8 | 325C166080 | PEAKING COIL | 27μH-J | |
| L 2A9 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2B0 | 325C163010 | PEAKING COIL | 330μH-K | |
| L 2B2 | 325C166070 | PEAKING COIL | 22μH-J | |
| L 2B3 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 2B4 | 325C167070 | PEAKING COIL | 150μH-J | |
| L 2B6 | 325C167070 | PEAKING COIL | 150μH-J | |
| L 2B7 | 325C167090 | PEAKING COIL | 220μH-J | |
| L 2B8 | 325C168000 | PEAKING COIL | 270μH-J | |
| L 2B9 | 325C167050 | PEAKING COIL | 100μH-J | |
| L 2C0 | 325C167040 | PEAKING COIL | 82μH-J | |
| L 2C1 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2C2 | 325C162090 | PEAKING COIL | 220μH-K | |
| L 2C3 | 325C166040 | PEAKING COIL | 12μH-J | |
| L 2C4 | 325C166030 | PEAKING COIL | 10μH-J | |
| L 2C5 | 325C166030 | PEAKING COIL | 10μH-J | |
| L 2C6 | 325C166090 | PEAKING COIL | 33μH-J | |
| L 2C7 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2C8 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2C9 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2D0 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2D1 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2E0 | 325C161090 | PEAKING COIL | 33μH-K | |
| L 2E1 | 325C163000 | PEAKING COIL | 270μH-K | |
| L 2Z9 | 325C167010 | PEAKING COIL | 47μH-J | [G] |
| L 2000 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2001 | 325C167000 | PEAKING COIL | 39μH-J | |
| L 2002 | 325C167000 | PEAKING COIL | 39μH-J | |
| L 2003 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2004 | 325C242050 | CHIP COIL | 100μH-K | |
| L 2005 | 325C166090 | PEAKING COIL | 33μH-J | |
| L 2006 | 325C166060 | PEAKING COIL | 18μH-J | |
| L 301 | 325C112070 | PEAKING COIL | 150μH-K | |
| L 302 | 325C162010 | PEAKING COIL | 47μH-K | |
| L 303 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 304 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3A0 | 321C010040 | RF COIL | 1000μH-J | |
| L 3A1 | 321C015050 | RF COIL | 8200μH-J | |
| L 3A3 | 325C107080 | PEAKING COIL | 180μH-J | |
| L 3A5 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3Z0 | 325C168070 | PEAKING COIL | 1000μH-J | [G] |
| L 3Z1 | 325C168070 | PEAKING COIL | 1000μH-J | [G] |
| L 3Z2 | 325C168070 | PEAKING COIL | 1000μH-J | [G] |
| L 3Z3 | 325C168070 | PEAKING COIL | 1000μH-J | [G] |
| L 3302 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3303 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3304 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3310 | 325C167030 | PEAKING COIL | 68μH-J | |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| L 3311 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3320 | 325C262050 | PEAKING COIL | 100μH-K | [E, IR, NZ] |
| L 3320 | 325C122050 | PEAKING COIL | 100μH-K | [A, G, Y] |
| L 3321 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 3322 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 501 | 325C267050 | PEAKING COIL | 100μH-J | |
| L 502 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 503 | 325C267050 | PEAKING COIL | 100μH-J | |
| L 570 | 299P124010 | LATCH MAGNET | | |
| L 5A0 | 325C124050 | PEAKING COIL | 0.33μH-M | |
| L 5A1 | 325C124080 | PEAKING COIL | 0.56μH-M | |
| L 5A2 | 325C124050 | PEAKING COIL | 0.33μH-M | |
| L 5A3 | 325C167050 | PEAKING COIL | 100μH-J | |
| L 5A4 | 325C166040 | PEAKING COIL | 12μH-J | |
| L 5A5 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 5A6 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 5Z0 | 325C261030 | PEAKING COIL | 10μH-K | |
| L 6A0 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6A1 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6B7 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6C0 | 325C166020 | PEAKING COIL | 8.2MHJ | |
| L 6C2 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6C3 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 6C4 | 325C167010 | PEAKING COIL | 47μH-J | |
| L 6C5 | 321C015050 | RF COIL | 8200μH-J | |
| L 6C6 | 325C166090 | PEAKING COIL | 33μH-J | |
| L 6C7 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 6C8 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 6C9 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 6D0 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 6D1 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6D2 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 6D3 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 6D4 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6D5 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6D6 | 325C262050 | PEAKING COIL | 100μH-K | |
| L 6D9 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6000 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6001 | 325C242050 | CHIP COIL | 100μH-K | |
| L 6002 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6003 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6004 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6005 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6006 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 6007 | 325C242050 | CHIP COIL | 100μH-K | |
| L 700 | 325C242050 | CHIP COIL | 100μH-K | |
| L 701 | 325C242050 | CHIP COIL | 100μH-K | |
| L 702 | 325C242050 | CHIP COIL | 100μH-K | |
| L 703 | 325C242050 | CHIP COIL | 100μH-K | |
| L 704 | 325C242050 | CHIP COIL | 100μH-K | |
| L 705 | 325C242050 | CHIP COIL | 100μH-K | |
| L 706 | 325C242050 | CHIP COIL | 100μH-K | |
| L 707 | 325C242050 | CHIP COIL | 100μH-K | |
| L 708 | 325C242050 | CHIP COIL | 100μH-K | |
| L 709 | 325C165090 | PEAKING COIL | 4.7μH-J | |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| L 710 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 711 | 325C112010 | PEAKING COIL | 47μH-K | |
| L 712 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 713 | 325C166050 | PEAKING COIL | 15μH-J | |
| L 714 | 325C165090 | PEAKING COIL | 4.7μH-J | |
| L 715 | 325C242050 | CHIP COIL | 100μH-K | |
| L 716 | 325C242050 | CHIP COIL | 100μH-K | |
| L 717 | 325C107020 | PEAKING COIL | 56μH-J | |
| L 7A0 | 325C168060 | PEAKING COIL | 820μH-J | [E, IR, NZ] |
| L 7A0 | 325C160010 | PEAKING COIL | 1μH-K | [A, G, Y] |
| L 7A1 | 325C168060 | PEAKING COIL | 820μH-J | [E, IR, NZ] |
| L 7A1 | 327P066010 | SIF COIL | 5.5/5.74 MHz | [A, G, Y] |
| L 7A2 | 327P066010 | SIF COIL | 5.5/5.74 MHz | [A, G, Y] |
| L 7A3 | 325C166030 | PEAKING COIL | 10μH-J | [E, IR, NZ] |
| L 7A3 | 409P405030 | PILOT | | [A, G, Y] |
| L 7A4 | 325C166050 | PEAKING COIL | 15μH-J | [E, IR, NZ] |
| L 7A5 | 409P402030 | EMI FILTER (DSS306-55FZ103N100) | | [E, IR, NZ] |
| L 7B0 | 325C166040 | PEAKING COIL | 12μH-J | [E, IR, NZ] |
| L 7B1 | 325C166040 | PEAKING COIL | 12μH-J | [E, IR, NZ] |
| L 7B2 | 411P011010 | BEADS FERRITE | Z8F503S-P | [E, IR, NZ] |
| L 7B3 | 325C166090 | PEAKING COIL | 33μH-J | [IR] |
| L 7Y2 | 325C162030 | PEAKING COIL | 68μH-K | [E, NZ] |
| L 7Y3 | 323P184010 | VIF COIL | K1-0018 | [E, NZ] |
| L 7Y4 | 325C241030 | CHIP COIL | 10μH-K | [E, NZ] |
| L 801 | 325C267050 | PEAKING COIL | 100μH-J | [G] |
| L 8B1 | 325C133030 | CHIP COIL | 470μH-K 453232 | [G] |
| L 8B2 | 325C165020 | PEAKING COIL | 1.2μH-J | [G] |
| L 901 | 351P038010 | LINE FILTER | | [G] |
| VL6C1 | 349P166010 | DL MATCH | | |

## TRANSFORMERS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| | 350P490010 | POWER | | [A] |
| | 350P490020 | POWER | | [E, G, IR, Y] |
| | 350P490030 | POWER | | [NZ] |
| T 3A0 | 409P423030 | AUDIO BIAS OSC | 705720044D | |
| VL6D8 | 332P007010 | H-OSCILLATOR | | [E, G, Y] |

## VARIABLE RESISTORS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| VR200 | 127C090070 | VR-SEMIFIXED | 1/5W, 85kΩ-M | |
| VR201 | 127C180070 | VR-SEMIFIXED | 1/5W B5kΩ-M | |
| VR202 | 127C180050 | VR-SEMIFIXED | 1/5W B2kΩ-M | |
| VR2A0 | 127C080050 | VR-SEMIFIXED | 1/5W B2kΩ-M | |
| VR2A1 | 127C080080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR2A2 | 127C080040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |
| VR2A3 | 127C091000 | VR-SEMIFIXED | 1/5W B30kΩ-M | |
| VR2A5 | 127C090090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR2A6 | 127C090090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR2A7 | 127C081040 | VR-SEMIFIXED | 1/10W 300kΩ-M | |
| VR2A8 | 127C090090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR2A9 | 127C090080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR2B0 | 127C090090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR2B2 | 127C081000 | VR-SEMIFIXED | 1/5W B30kΩ-M | |
| VR2B3 | 127C080090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR2B4 | 127C091000 | VR-SEMIFIXED | 1/5W B30kΩ-M | |
| VR2B5 | 127C090040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| VR2B6 | 127C080050 | VR-SEMIFIXED | 1/5W B2kΩ-M | |
| VR2B7 | 127C080070 | VR-SEMIFIXED | 1/5W B5kΩ-M | |
| VR2B8 | 127C080070 | VR-SEMIFIXED | 1/5W B5kΩ-M | |
| VR2B9 | 127C080050 | VR-SEMIFIXED | 1/5W B2kΩ-M | |
| VR2008 | 127C080050 | VR-SEMIFIXED | 1/5W B2kΩ-M | |
| VR2024 | 127C081020 | VR-SEMIFIXED | 1/5W B100kΩ-M | |
| VR301 | 127C180070 | VR-SEMIFIXED | 1/5W B5kΩ-M | |
| VR3A0 | 127C081020 | VR-SEMIFIXED | 1/5W B100kΩ-M | |
| VR3A1 | 127C080080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR3301 | 127C090080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR3302 | 127C090080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR3305 | 127C080090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR3306 | 127C080090 | VR-SEMIFIXED | 1/5W B20kΩ-M | |
| VR3307 | 127C081030 | VR-SEMIFIXED | 1/10WB200kΩ-N | |
| VR3308 | 127C081030 | VR-SEMIFIXED | 1/10WB200kΩ-N | |
| VR4A0 | 127C091020 | VR-SEMIFIXED | 1/5W B100kΩ-M | |
| VR5A0 | 127C091030 | VR-SEMIFIXED | 1/5W B200kΩ-M | |
| VR6C1 | 127C080030 | VR-SEMIFIXED | 1/5W B500-M | |
| VR6E9 | 127C081020 | VR-SEMIFIXED | 1/5W B100kΩ-M | |
| VR6F1 | 127C091000 | VR-SEMIFIXED | 1/5W B30kΩ-M | |
| VR6J5 | 127C090040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |
| VR6K0 | 127C090020 | VR-SEMIFIXED | 1/5W B300-M | |
| VR6K6 | 127C090040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |
| VR6P9 | 127C090020 | VR-SEMIFIXED | 1/5W B300-M | |
| VR6001 | 127C080080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR6009 | 127C080080 | VR-SEMIFIXED | 1/5W B10kΩ-M | |
| VR6015 | 127C090060 | VR-SEMIFIXED | 1/5W B3kΩ-M | |
| VR6024 | 127C090060 | VR-SEMIFIXED | 1/5W B3kΩ-M | |
| VR6030 | 127C090060 | VR-SEMIFIXED | 1/5W B3kΩ-M | |
| VR702 | 127C090040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |
| VR703 | 127C090040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |
| VR704 | 127C090040 | VR-SEMIFIXED | 1/5W B1kΩ-M | |
| VR705 | 127C090060 | VR-SEMIFIXED | 1/5W B3kΩ-M | |
| VR706 | 127C090050 | VR-SEMIFIXED | 1/5W B2KM | |
| VR707 | 127C090020 | VR-SEMIFIXED | 1/5W B300-M | |
| VR7A0 | 127C080090 | VR-SEMIFIXED | 1/5W B20kΩ-M | [A, G, Y] |
| VR7A1 | 127C080020 | VR-SEMIFIXED | 1/10W B300-M | [A, G, Y] |
| VR7A2 | 127C080010 | VR-SEMIFIXED | 1/5W B200-M | [A, G, Y] |
| VR7A3 | 127C080060 | VR-SEMIFIXED | 1/5W B3kΩ-M | [A, G, Y] |
| VR7A4 | 127C080060 | VR-SEMIFIXED | 1/5W B3kΩ-M | [A, G, Y] |
| VR7A5 | 127C081020 | VR-SEMIFIXED | 1/5W B100kΩ-M | [A, G, Y] |
| VR802 | 129D132040 | VR-PCB | 1/20W B20kΩ-15F CS | |
| VR803 | 129D132040 | VR-PCB | 1/20W B20kΩ-15F CS | |
| VR805 | 129D132050 | VR-PCB | 1/20W B100kΩ-15F | |
| VR808 | 129C135040 | VR-SLIDE | | |
| VR810 | 129D132040 | VR-PCB | 1/20W B20kΩ-15F CS | |
| VR8B0 | 129C126030 | VR-PCB | | |

## RESISTORS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION | |
|---|---|---|---|---|
| R 102 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J | |
| R 103 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J | [A, G, IR, Y] |
| R 104 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J | |
| R 105 | 103P404070 | CHIP RESISTOR | 1/10W 68kΩ-J | |
| R 106 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J | |
| R 107 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J | |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 109 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 110 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 118 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J |
| R 161 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 162 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 163 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 164 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 165 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 166 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 167 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 168 | 103P405050 | CHIP RESISTOR | 1/10W 330kΩ-J |
| R 169 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 170 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J |
| R 171 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [E, NZ] |
| R 172 | 103P405050 | CHIP RESISTOR | 1/10W 330kΩ-J |
| R 173 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [E82G] |
| R 175 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 176 | 103P401010 | CHIP RESISTOR | 1/10W 68Ω-J |
| R 200 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J |
| R 201 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J (INT) |
| R 201 | 103P472080 | CHIP RESISTOR | 1/10W 1.3kΩ-F (H. AMP) |
| R 202 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J |
| R 203 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J (H. AMP) |
| R 203 | 103P471010 | CHIP RESISTOR | 1/10W 270Ω-F (INT) |
| R 204 | 103P471030 | CHIP RESISTOR | 1/10W 330Ω-F (INT) |
| R 204 | 103P472060 | CHIP RESISTOR | 1/10W 1.1kΩ-F (H. AMP) |
| R 205 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J (INT) |
| R 205 | 103P473000 | CHIP RESISTOR | 1/10W 1.6kΩ-F (H. AMP) |
| R 206 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 207 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J (H. AMP) |
| R 207 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J (INT) |
| R 208 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J (INT) |
| R 208 | 103P473010 | CHIP RESISTOR | 1/10W 1.8kΩ-F (H. AMP) |
| R 209 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J (INT) |
| R 209 | 103P471020 | CHIP RESISTOR | 1/10W 300Ω-F (H. AMP) |
| R 210 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J (INT) |
| R 210 | 103P471040 | CHIP RESISTOR | 1/10W 360Ω-F (H. AMP) |
| R 211 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 212 | 103P471050 | CHIP RESISTOR | 1/10W 390Ω-F |
| R 213 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J (H. AMP) |
| R 213 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J (INT) |
| R 214 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J (H. AMP) |
| R 214 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J (INT) |
| R 215 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 216 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 217 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J (INT) |
| R 217 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F (H. AMP) |
| R 218 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 219 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J (H. AMP) |
| *R 219* | *103P403080* | *CHIP RESISTOR* | *1/10W 12kΩ-J (INT)* |
| R 220 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J (H. AMP) |
| *R 220* | *103P475070* | *CHIP RESISTOR* | *1/10W 22kΩ-F (INT)* |
| R 221 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J (H. AMP) |
| R 221 | 103P475090 | CHIP RESISTOR | 1/10W 27kΩ-F (INT) |
| R 222 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J (INT) |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 222 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J (H. AMP) |
| R 223 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 224 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J (H. AMP) |
| R 224 | 103P474020 | CHIP RESISTOR | 1/10W 5.1kΩ-F (INT) |
| R 225 | 103P473050 | CHIP RESISTOR | 1/10W 2.7kΩ-F |
| R 226 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J (H. AMP) |
| R 226 | 103P473050 | CHIP RESISTOR | 1/10W 2.7kΩ-F (INT) |
| R 227 | 103P474030 | CHIP RESISTOR | 1/10W 5.6kΩ-F (INT) |
| R 227 | 103P474040 | CHIP RESISTOR | 1/10W 6.2kΩ-F (H. AMP) |
| R 228 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F (INT) |
| R 228 | 103P476050 | CHIP RESISTOR | 1/10W 47kΩ-F (H. AMP) |
| R 229 | 103P476010 | CHIP RESISTOR | 1/10W 33kΩ-F |
| R 230 | 103P475010 | CHIP RESISTOR | 1/10W 12kΩ-F |
| R 231 | 103P474030 | CHIP RESISTOR | 1/10W 5.6kΩ-F |
| R 232 | 103P471010 | CHIP RESISTOR | 1/10W 270Ω-F |
| R 233 | 103P474000 | CHIP RESISTOR | 1/10W 4.3kΩ-F |
| R 234 | 103P405040 | CHIP RESISTOR | 1/10W 270kΩ-J |
| R 235 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 236 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 238 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 239 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 240 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| R 241 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 242 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 243 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 244 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 245 | 103P474010 | CHIP RESISTOR | 1/10W 4.7kΩ-F |
| R 246 | 103P476050 | CHIP RESISTOR | 1/10W 47kΩ-F |
| R 247 | 103P475020 | CHIP RESISTOR | 1/10W 13kΩ-F |
| R 248 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 249 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 250 | 103P479070 | CHIP RESISTOR | 1/10W 1MΩ-F |
| R 251 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 252 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 253 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 254 | 103P475030 | CHIP RESISTOR | 1/10W 15kΩ-F |
| R 255 | 103P473070 | CHIP RESISTOR | 1/10W 3.3kΩ-F |
| R 256 | 103P474050 | CHIP RESISTOR | 1/10W 6.8kΩ-F |
| R 257 | 103P475010 | CHIP RESISTOR | 1/10W 12kΩ-F |
| R 258 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 259 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 260 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 261 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 262 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 263 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 264 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 265 | 103P476050 | CHIP RESISTOR | 1/10W 47kΩ-F |
| R 266 | 103P405040 | CHIP RESISTOR | 1/10W 270kΩ-J |
| R 267 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 268 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 269 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 280 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2A0 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2A1 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2A2 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 2A3 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 2A4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2A5 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2A6 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2A7 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2A8 | 103P403060 | CHIP RESISTOR | 1/10W 8.2kΩ-J |
| R 2A9 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2B0 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 2B1 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2B2 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2B3 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 2B4 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 2B5 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 2B6 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2B7 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 2B8 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2B9 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 2C0 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 2C1 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 2C2 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2C3 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 2C4 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 2C5 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 2C6 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 2C7 | 103P472010 | CHIP RESISTOR | 1/10W 680Ω-F |
| R 2C8 | 103P478090 | CHIP RESISTOR | 1/10W 470kΩ-F |
| R 2C9 | 103P478050 | CHIP RESISTOR | 1/10W 330kΩ-F |
| R 2D0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2D2 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2D3 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2D4 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2D6 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2D8 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2D9 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2E1 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2E2 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2E3 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 2E4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2E6 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2E7 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J |
| R 2E9 | 103P474050 | CHIP RESISTOR | 1/10W 6.8kΩ-F |
| R 2F0 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2F1 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2F2 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 2F4 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω [A, E, IR, NZ, Y] |
| R 2F7 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2F8 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 2F9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2G0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2G1 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 2G2 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 2G3 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2G4 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J |
| R 2G8 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J |
| R 2G9 | 103P475010 | CHIP RESISTOR | 1/10W 12kΩ-F |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 2H0 | 103P474050 | CHIP RESISTOR | 1/10W 6.8kΩ-F |
| R 2H1 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2H2 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2H3 | 103P473020 | CHIP RESISTOR | 1/10W 2kΩ-F |
| R 2H4 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 2H5 | 103P471000 | CHIP RESISTOR | 1/10W 240Ω-F |
| R 2H6 | 103P400090 | CHIP RESISTOR | 1/10W 47Ω-J |
| R 2H7 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2H8 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2H9 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J |
| R 2J0 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2J1 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| R 2J2 | 103P403060 | CHIP RESISTOR | 1/10W 8.2kΩ-J |
| R 2J3 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 2J5 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2J6 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 2J7 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 2J8 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2J9 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2K0 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 2K1 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2K2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2K3 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 2K4 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2K5 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2K6 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 2K7 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J |
| R 2K8 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 2K9 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 2L0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2L1 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 2L2 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2L4 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2L5 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 2L6 | 103P470080 | CHIP RESISTOR | 1/10W 200Ω-F |
| R 2L7 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J |
| R 2M0 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 2M1 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 2M2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2M3 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2M4 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2M5 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 2M6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2M8 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 2M9 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2N0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2N1 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 2N2 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2N3 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2N4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2N5 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 2N6 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| R 2N7 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2N8 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 2N9 | 103P406000 | CHIP RESISTOR | 1/10W 820kΩ-J |
| R 2P0 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2P1 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2P2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2P3 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2P4 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2P5 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2P6 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2P7 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2P8 | 103P402080 | CHIP RESISTOR | 1/10W 1.8kΩ-J |
| R 2P9 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2Q0 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2Q1 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2Q2 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2Q3 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 2Q4 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 2Q5 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2Q6 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2Q7 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2Q8 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2Q9 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 2R0 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2R1 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 2R2 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 2R3 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2R4 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2R5 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2R6 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2R7 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2R8 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 2R9 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2S0 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 2S1 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 2S3 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 2S4 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2S6 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2S7 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2S9 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2T0 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 2T2 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2T3 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2T4 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2T5 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| R 2T8 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 2T9 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2U0 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 2U1 | 103P403020 | CHIP RESISTOR | 1/10W 3.9kΩ-H |
| R 2U3 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J |
| R 2U4 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2U5 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 2U6 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 2U7 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2U8 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 2U9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2V0 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 2V1 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 2V2 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 2V3 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2V4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2V5 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2V6 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2V7 | 103P405020 | CHIP RESISTOR | 1/10W 180kΩ-J |
| R 2V8 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2W0 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2W1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2W2 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 2W3 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 2W4 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2W5 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2W6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2W7 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 2W8 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2W9 | 103P406050 | CHIP RESISTOR | 1/10W 2.2MΩ-J |
| R 2X0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2X1 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 2X2 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 2X3 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2X4 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2X5 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 2X6 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2X7 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2X8 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2X9 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2Y0 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 2Y1 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 2Y2 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 2Y3 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2Y4 | 103P403060 | CHIP RESISTOR | 1/10W 8.2kΩ-J |
| R 2Y5 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2Y6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2Z0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2Z5 | 103P405020 | CHIP RESISTOR | 1/10W 180kΩ-J |
| R 2Z6 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2Z9 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J [G] |
| R 2006 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 2007 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 2011 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 2012 | 103P403060 | CHIP RESISTOR | 1/10W 8.2kΩ-J |
| R 2014 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2015 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2016 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 2017 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 2018 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2019 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 2020 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 2021 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J |
| R 2022 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 2023 | 103P404070 | CHIP RESISTOR | 1/10W 68kΩ-J |
| R 2025 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 2026 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 2029 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 2031 | 103P473090 | CHIP RESISTOR | 1/10W 3.9kΩ-F |
| R 2032 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 2033 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 301 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 303 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 304 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 305 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 306 | 103P471090 | CHIP RESISTOR | 1/10W 560Ω-F |
| R 307 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 308 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 309 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 310 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 311 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 312 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 314 | 103P470090 | CHIP RESISTOR | 1/10W 220Ω-F |
| R 315 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 316 | 103P471050 | CHIP RESISTOR | 1/10W 390Ω-F |
| R 317 | 103P470010 | CHIP RESISTOR | 1/10W 100Ω-F |
| R 318 | 103P472010 | CHIP RESISTOR | 1/10W 680Ω-F |
| R 319 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 320 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 321 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 322 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 324 | 103P479050 | CHIP RESISTOR | 1/10W 820kΩ-F |
| R 325 | 103P355070 | CHIP RESISTOR | 1/8W470kΩ-J |
| R 3A0 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3A2 | 103P714020 | CHIP RESISTOR | 1/6~1/4W 27kΩ-J |
| R 3A3 | 103P408080 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 3A4 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 3A5 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 3A6 | 103P403060 | CHIP RESISTOR | 1/10W 8.2kΩ-J |
| R 3A7 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 3A8 | 103P400010 | CHIP RESISTOR | 1/10W 10Ω-J |
| R 3A9 | 103P405050 | CHIP RESISTOR | 1/10W 330kΩ-J |
| R 3B0 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 3B1 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 3B4 | 103P406010 | CHIP RESISTOR | 1/10W 1MΩ-J |
| R 3B5 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 3B6 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3B7 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 3B8 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 3B9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 3C1 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3C2 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 3C3 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3C4 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3C5 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 3C6 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3C7 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3C8 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3C9 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3D2 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 3E0 | 103P404070 | CHIP RESISTOR | 1/10W 68kΩ-J |
| R 3E1 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 3E2 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3E3 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3E4 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 3E8 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3F0 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3F1 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 3W0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [G] |
| R 3W3 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [G] |
| R 3W4 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [G] |
| R 3W5 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [G] |
| R 3W6 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [G] |
| R 3W7 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [G] |
| R 3W8 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [G] |
| R 3W9 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [G] |
| R 3X0 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [G] |
| R 3Z4 | 103P409090 | CHIP RESISTOR | 1/10W 75Ω-J [G] |
| R 3Z5 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J[G] |
| R 3Z6 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J[G] |
| R 3Z7 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J[G] |
| R 3Z8 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J[G] |
| R 3Z9 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [G] |
| R 3300 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 3310 | 103P401010 | CHIP RESISTOR | 1/10W 68Ω-J |
| R 3311 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3312 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3315 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 3316 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 3333 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3334 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3335 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 3336 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 3337 | 103P405020 | CHIP RESISTOR | 1/10W 180kΩ-J |
| R 3338 | 103P405020 | CHIP RESISTOR | 1/10W 180kΩ-J |
| R 3341 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3342 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3343 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3344 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3345 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3346 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 3347 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3348 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3351 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 3352 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 3353 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 3354 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 3355 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 3356 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 3361 | 103P472060 | CHIP RESISTOR | 1/10W 1.1kΩ-F |
| R 3362 | 103P472060 | CHIP RESISTOR | 1/10W 1.1kΩ-F |
| R 3363 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 3364 | 103P474090 | CHIP RESISTOR | 1/10W 10kΩ-F |
| R 3365 | 103P475050 | CHIP RESISTOR | 1/10W 18kΩ-F |
| R 3366 | 103P475050 | CHIP RESISTOR | 1/10W 18kΩ-F |
| R 3367 | 103P474030 | CHIP RESISTOR | 1/10W 5.6kΩ-F |
| R 3368 | 103P474030 | CHIP RESISTOR | 1/10W 5.6kΩ-F |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 3369 | 103P475090 | CHIP RESISTOR | 1/10W 27kΩ-F |
| R 3370 | 103P475090 | CHIP RESISTOR | 1/10W 27kΩ-F |
| R 3371 | 103P475010 | CHIP RESISTOR | 1/10W 12kΩ-F |
| R 3372 | 103P474070 | CHIP RESISTOR | 1/10W 8. 2kΩ-F |
| R 3373 | 103P473080 | CHIP RESISTOR | 1/10W 3. 6kΩ-F |
| R 3374 | 103P472070 | CHIP RESISTOR | 1/10W 1. 2kΩ-F |
| R 3375 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3378 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3380 | 103P475040 | CHIP RESISTOR | 1/10W 16kΩ-F |
| R 3381 | 103P474060 | CHIP RESISTOR | 1/10W 7. 5kΩ-F |
| R 3382 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J |
| R 3385 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3386 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 3389 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 3390 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 3395 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 3470 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| R 3471 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J |
| R 3481 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 3482 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J |
| R 3483 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 3520 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 3521 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| R 3522 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3523 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3530 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 3531 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 3532 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 3533 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 3565 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 3566 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 3600 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3601 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3602 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3603 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3604 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3605 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3606 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-H |
| R 3607 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 3608 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 3609 | 103P403060 | CHIP RESISTOR | 1/10W 8. 2kΩ-J [A, NZ] |
| R 3609 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [E, G, IR, Y] |
| R 3610 | 103P405050 | CHIP RESISTOR | 1/10W 330kΩ-J |
| R 3611 | 103P404070 | CHIP RESISTOR | 1/10W 68kΩ-J |
| R 3612 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-H |
| R 3620 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3621 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3622 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3623 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3624 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3625 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3626 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| *R 3627* | *103P402070* | *CHIP RESISTOR* | 1/10W 1. 5kΩ-J |
| R 3628 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 3629 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 3630 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J |
| R 3631 | 103P405070 | CHIP RESISTOR | 1/10W 470kΩ-J |
| R 3634 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3635 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 3637 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 3638 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 3651 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [A, G, Y] |
| R 3652 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J [A, G, Y] |
| R 5A7 | 103P544090 | NETWORK | 1/8W 100kΩ-J |
| R 5L0 | 103P398090 | FUSE | 1/2W 5. 6Ω-J |
| R 6A0 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6A1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6A2 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J |
| R 6A3 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 6A4 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 6A5 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 6A6 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J |
| R 6A7 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6A8 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 6A9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6B0 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| R 6B1 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 6B2 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J |
| R 6B3 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6C0 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 6C2 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J |
| R 6C3 | 103P712090 | CHIP RESISTOR | 1/6~1/4W 2. 2kΩ-J |
| R 6C4 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 6C5 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 6C6 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 6C7 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J |
| R 6C8 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 6C9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6D0 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| R 6D1 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 6D3 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6D4 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 6D5 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6D6 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6D7 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-H |
| R 6D8 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6E0 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J |
| R 6E1 | 103P473010 | CHIP RESISTOR | 1/10W 1. 8kΩ-F |
| R 6E3 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6E4 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 6E5 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-H |
| R 6E6 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 6E7 | 103P4000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 6E8 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 6E9 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 6F0 | 103P403020 | CHIP RESISTOR | 1/10W 3. 9kΩ-H |
| R 6F1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6F2 | 103P404040 | CHIP RESISTOR | 1/10W 39kΩ-J |
| R 6F3 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6F4 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 6F5 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6F6 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6F7 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 6F8 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6F9 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6G0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6G1 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6G2 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6G3 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6G6 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 6G7 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6G8 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6G9 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| R 6H8 | 103P473030 | CHIP RESISTOR | 1/10W 2. 2kΩ-F |
| R 6H9 | 103P473030 | CHIP RESISTOR | 1/10W 2. 2kΩ-F |
| R 6J0 | 103P470010 | CHIP RESISTOR | 1/10W 100Ω-F |
| R 6J1 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 6J2 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 6J3 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6J4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6J6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6J7 | 103P471050 | CHIP RESISTOR | 1/10W 390Ω-F |
| R 6K1 | 103P470010 | CHIP RESISTOR | 1/10W 100Ω-F |
| R 6K2 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 6K3 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 6K4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6K5 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6K7 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6K8 | 103P400070 | CHIP RESISTOR | 1/10W 33Ω-J [E, G, Y] |
| R 6K9 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J [E, G, Y] |
| R 6L0 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J [E, G, Y] |
| R 6L1 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [E, G, Y] |
| R 6L3 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 6L4 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6L6 | 103P471010 | CHIP RESISTOR | 1/10W 270Ω-F |
| R 6M0 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6M1 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6M2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6M3 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6M4 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 6M6 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 6M7 | 103P401090 | CHIP RESISTOR | 1/10W 330Ω-J |
| R 6P0 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 6P1 | 103P470010 | CHIP RESISTOR | 1/10W 100Ω-F |
| R 6P2 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| R 6P3 | 103P472090 | CHIP RESISTOR | 1/10W 1. 5kΩ-F |
| R 6P4 | 103P472090 | CHIP RESISTOR | 1/10W 1. 5kΩ-F |
| R 6P5 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 6P7 | 103P470050 | CHIP RESISTOR | 1/10W 150Ω-F |
| R 6P8 | 103P471050 | CHIP RESISTOR | 1/10W 390Ω-F |
| R 6Q0 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 6Q1 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 6Q2 | 103P402070 | CHIP RESISTOR | 1/10W 1. 5kΩ-J |
| R 6Q3 | 103P402090 | CHIP RESISTOR | 1/10W 2. 2kΩ-J |
| R 6Q4 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 6Q7 | 103P403030 | CHIP RESISTOR | 1/10W 4. 7kΩ-J |
| R 6Q8 | 103P471030 | CHIP RESISTOR | 1/10W 330Ω-F |
| R 6Q9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6R0 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6R1 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 6R2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6R3 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6R4 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6R5 | 103P405000 | CHIP RESISTOR | 1/10W 120kΩ-J |
| R 6S0 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J |
| R 6S1 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J |
| R 6S2 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6S3 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6S4 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6S5 | 103P403000 | CHIP RESISTOR | 1/10W 2. 7kΩ-J |
| R 6T0 | 103P403040 | CHIP RESISTOR | 1/10W 5. 6kΩ-J |
| R 6T1 | 103P403010 | CHIP RESISTOR | 1/10W 3. 3kΩ-J |
| R 6T2 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 6T3 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 6000 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J |
| R 6004 | 103P405000 | CHIP RESISTOR | 1/10W 120kΩ-J |
| R 6006 | 103P476060 | CHIP RESISTOR | 1/10W 51kΩ-F |
| R 6008 | 103P406000 | CHIP RESISTOR | 1/10W 820kΩ-J |
| R 6009 | 103P406000 | CHIP RESISTOR | 1/10W 820kΩ-J |
| R 6011 | 103P404080 | CHIP RESISTOR | 1/10W 82kΩ-J |
| R 6012 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6013 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6014 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6016 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6017 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6018 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 6019 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 6021 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6022 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 6023 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 6025 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6026 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6027 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 6028 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 6031 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6032 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6033 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 6034 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 6036 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6037 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6038 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 6039 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J |
| R 6040 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6041 | 103P402060 | CHIP RESISTOR | 1/10W 1. 2kΩ-J |
| R 6042 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 6043 | 103P401050 | CHIP RESISTOR | 1/10W 150Ω-J |
| R 6044 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 6045 | 103P404010 | CHIP RESISTOR | 1/10W 22Ω-J |
| R 6046 | 103P477060 | CHIP RESISTOR | 1/10W 130kΩ-F |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| R 6047 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 6048 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6049 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6050 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 6051 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 6052 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6053 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6054 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6055 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 6056 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J |
| R 6060 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J |
| R 6063 | 103P405010 | CHIP RESISTOR | 1/10W 120kΩ-J |
| R 6067 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J |
| R 700 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 701 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 702 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 703 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 704 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 705 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 706 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 707 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 708 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 709 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 710 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 711 | 103P470090 | CHIP RESISTOR | 1/10W 220Ω-F |
| R 712 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 713 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 714 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 715 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 716 | 103P406050 | CHIP RESISTOR | 1/10W 2.2MΩ-J |
| R 717 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 718 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 719 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 720 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 721 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J |
| R 722 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 723 | 103P406050 | CHIP RESISTOR | 1/10W 2.2MΩ-J |
| R 724 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 725 | 103P474010 | CHIP RESISTOR | 1/10W 4.7kΩ-F |
| R 726 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 727 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 728 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 729 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J |
| R 730 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 731 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 732 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J |
| R 733 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 734 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 735 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 736 | 103P472070 | CHIP RESISTOR | 1/10W 1.2kΩ-F |
| R 737 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 738 | 103P471070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 739 | 103P403010 | CHIP RESISTOR | 1/10W 3.3kΩ-J |
| R 740 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 741 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 742 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 743 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 744 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 745 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 746 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 747 | 103P471050 | CHIP RESISTOR | 1/10W 390Ω-F |
| R 748 | 103P470010 | CHIP RESISTOR | 1/10W 100Ω-F |
| R 749 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J |
| R 750 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 751 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J |
| R 752 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 753 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 754 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 755 | 103P403050 | CHIP RESISTOR | 1/10W 6.8kΩ-J |
| R 756 | 103P402070 | CHIP RESISTOR | 1/10W 1.5kΩ-J |
| R 757 | 103P404010 | CHIP RESISTOR | 1/10W 22kΩ-J |
| R 758 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 759 | 103P473030 | CHIP RESISTOR | 1/10W 2.2kΩ-F |
| R 760 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 761 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 762 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 763 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J |
| R 764 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J |
| R 765 | 103P403000 | CHIP RESISTOR | 1/10W 2.7kΩ-J |
| R 766 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 767 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J |
| R 768 | 103P472090 | CHIP RESISTOR | 1/10W 1.5kΩ-F |
| R 769 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 770 | 103P472010 | CHIP RESISTOR | 1/10W 680Ω-F |
| R 771 | 103P402060 | CHIP RESISTOR | 1/10W 1.2kΩ-J |
| R 772 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J |
| R 773 | 103P472050 | CHIP RESISTOR | 1/10W 1kΩ-F |
| R 774 | 103P402080 | CHIP RESISTOR | 1/10W 1.8kΩ-J |
| R 775 | 103P402080 | CHIP RESISTOR | 1/10W 1.8kΩ-J |
| R 7A0 | 103P401080 | CHIP RESISTOR | 1/10W 270Ω-J [E, IR, NZ] |
| R 7A0 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J [A, Y, G] |
| R 7A1 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [E, IR, NZ] |
| R 7A1 | 103P402020 | CHIP RESISTOR | 1/10W 560Ω-J [A, Y, G] |
| R 7A2 | 103P405010 | CHIP RESISTOR | 1/10W 150kΩ-J [E, IR, NZ] |
| R 7A2 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J [A, Y, G] |
| R 7A3 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J [E, IR, NZ] |
| R 7A3 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J [A, Y, G] |
| R 7A4 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J |
| R 7A5 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [E, IR, NZ] |
| R 7A5 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [A, Y, G] |
| R 7A6 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [E, IR, NZ] |
| R 7A6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [A, Y, G] |
| R 7A7 | 103P401030 | CHIP RESISTOR | 1/10W 100Ω-J [E, IR, NZ] |
| R 7A7 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω [A, Y, G] |
| R 7A8 | 103P403020 | CHIP RESISTOR | 1/10W 3.9kΩ-H [E, IR, NZ] |
| R 7A8 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [A, Y, G] |
| R 7A9 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [E, IR, NZ] |
| R 7A9 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [A, Y, G] |
| R 7B0 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [E, IR, NZ] |
| R 7B0 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [A, Y, G] |
| R 7B1 | 103P403070 | CHIP RESISTOR | 1/10W 10kΩ-J [E, IR, NZ] |
| R 7B1 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [A, Y, G] |
| R 7B2 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [A, Y, G] |
| R 7B3 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J [E, IR, NZ] |
| R 7B3 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J [A, Y, G] |
| R 7B4 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [A, Y, G] |
| R 7B4 | 103P564050 | NETWORK | 1/8W 47KΩ-J [E, IR, NZ] |
| R 7B5 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J [A, Y, G] |
| R 7B6 | 103P401070 | CHIP RESISTOR | 1/10W 220Ω-J [A, Y, G] |
| R 7B7 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [A, Y, G] |
| R 7B8 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [A, Y, G] |
| R 7B9 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J [A, Y, G] |
| R 7C0 | 103P404070 | CHIP RESISTOR | 1/10W 68kΩ-J [E, IR, NZ] |
| R 7C0 | 103P403040 | CHIP RESISTOR | 1/10W 5.6kΩ-J [A, Y, G] |
| R 7C1 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J [E, IR, NZ] |
| R 7C1 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J [A, Y, G] |
| R 7C2 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J [E, IR, NZ] |
| R 7C2 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J [A, Y, G] |
| R 7C3 | 103P403020 | CHIP RESISTOR | 1/10W 3.9kΩ-H [E, IR, NZ] |
| R 7C3 | 103P405030 | CHIP RESISTOR | 1/10W 220kΩ-J [A, Y, G] |
| R 7C4 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J [E, IR, NZ] |
| R 7C4 | 103P404000 | CHIP RESISTOR | 1/10W 18kΩ-J [A, Y, G] |
| R 7C5 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J [E, IR, NZ] |
| R 7C5 | 103P404020 | CHIP RESISTOR | 1/10W 27kΩ-J [A, Y, G] |
| R 7C8 | 103P403020 | CHIP RESISTOR | 1/10W 3.9kΩ-H [E, IR, NZ] |
| R 7C9 | 103P402000 | CHIP RESISTOR | 1/10W 390Ω-J [E, IR, NZ] |
| R 7C9 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [A, Y, G] |
| R 7D0 | 103P402090 | CHIP RESISTOR | 1/10W 2.2kΩ-J [E, IR, NZ] |
| R 7D0 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [A, Y, G] |
| R 7D1 | 103P404060 | CHIP RESISTOR | 1/10W 56kΩ-J [A, Y, G] |
| R 7D2 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J [A, Y, G] |
| R 7D3 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J [E, IR, NZ] |
| R 7D3 | 103P403080 | CHIP RESISTOR | 1/10W 12kΩ-J [A, Y, G] |
| R 7D4 | 103P406000 | CHIP RESISTOR | 1/10W 820kΩ-J [A, Y, G] |
| R 7D5 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [E, NZ] |
| R 7D5 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J [A, Y, G] |
| R 7D6 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [A, Y, G] |
| R 7D8 | 103P402050 | CHIP RESISTOR | 1/10W 1kΩ-J [E, IR, NZ] |
| R 7D9 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J [E, IR, NZ] |
| R 7E5 | 103P404090 | CHIP RESISTOR | 1/10W 100kΩ-J [E, IR, NZ] |
| R 7E8 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [E, IR, NZ] |
| R 7K0 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [IR] |
| R 7K1 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [IR] |
| R 7K3 | 103P401060 | CHIP RESISTOR | 1/10W 180Ω-J |
| R 7K3 | 103P402030 | CHIP RESISTOR | 1/10W 680Ω-J |
| R 7Y0 | 103P402010 | CHIP RESISTOR | 1/10W 470Ω-J [E, NZ] |
| R 7Z1 | 103P403030 | CHIP RESISTOR | 1/10W 4.7kΩ-J [E, NZ] |
| R 7Z2 | 103P403090 | CHIP RESISTOR | 1/10W 15kΩ-J [E, NZ] |
| R 7Z3 | 103P402040 | CHIP RESISTOR | 1/10W 820Ω-J [E, NZ] |
| R 7Z4 | 103P402080 | CHIP RESISTOR | 1/10W 1.8kΩ-J [E, NZ] |
| R 7Z5 | 103P400090 | CHIP RESISTOR | 1/10W 47Ω-J [E, NZ] |
| R 7Z6 | 103P404050 | CHIP RESISTOR | 1/10W 47kΩ-J [E, NZ] |
| R 7Z7 | 103P404030 | CHIP RESISTOR | 1/10W 33kΩ-J [E, NZ] |
| R 887 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω [G] |
| R 902 | 109P052040 | FUSE | 1/4W-1.2Ω-J |
| R 903 | 103P370070 | FUSE | 1/4W-33Ω-J |
| R 905 | 103P371010 | FUSE | 1/4W68Ω-J |
| R 922 | 103P377060 | FUSE | 1/4W-0.47Ω-K |
| RJ 10 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω [E, IR, NZ] |
| RJ 11 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 12 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 13 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 14 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 15 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω [E, IR, NZ] |
| RJ 16 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω [E, IR, NZ] |
| RJ 1 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 2 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 3 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 4 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 5 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 6 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 7 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 8 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ 9 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ201 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ202 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ203 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ204 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ205 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ206 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |
| RJ282 | 103P409050 | CHIP RESISTOR | 1/10W 0Ω |

## CAPACITORS AND TRIMMERS

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 161 | 154P326000 | CHIP CAPACITOR | SL50V 1000pF-J |
| C 162 | 154P334070 | CHIP CAPACITOR | CH50V 330pF-J |
| C 164 | 154P326000 | CHIP CAPACITOR | SL50V 1000P |
| C 169 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 201 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K (H. AMP) |
| C 201 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K(INT) |
| C 203 | 154P330050 | CHIP CAPACITOR | CH50V 4pF-C |
| C 204 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 205 | 154P330070 | CHIP CAPACITOR | CH50V 6pF-C |
| C 206 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K(INT) |
| C 206 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z (H. AMP) |
| C 207 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 209 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K (INT) |
| C 209 | 154P330040 | CHIP CAPACITOR | CJ50V 3pF-C (H. AMP) |
| C 210 | 181P502060 | CHIP CAPACITOR | 16V47μF-M |
| C 211 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 213 | 154P330060 | CHIP CAPACITOR | CH50V 5pF-C |
| C 214 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 215 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 216 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 217 | 154P330060 | CHIP CAPACITOR | CH50V 5pF-C |
| C 218 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 219 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K (H. AMP) |
| C 219 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K(INT) |
| C 220 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 222 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 223 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 224 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K(INT) |
| C 224 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z(H. AMP) |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 225 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 226 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 227 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 228 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 229 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 230 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 231 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K(INT) |
| C 231 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z(H. AMP) |
| C 232 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z(H. AMP) |
| C 232 | 181P502030 | CHIP CAPACITOR | 16V10μF-M (INT) |
| C 234 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 235 | 154P321060 | CHIP CAPACITOR | SL50V 15pF-J |
| C 236 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 237 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 238 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 239 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 240 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 241 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z(H. AMP) |
| C 241 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K (INT) |
| C 242 | 154P330060 | CHIP CAPACITOR | CH50V 5pF-C |
| C 250 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 251 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 257 | 154P325040 | CHIP CAPACITOR | SL50V 560pF-J |
| C 258 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 260 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 262 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 263 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 264 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2A1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2A2 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 2A3 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2A5 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2A7 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2A8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2B1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2B2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2B5 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2C0 | 154P322020 | CHIP CAPACITOR | SL50V 27pF-J |
| C 2D0 | 154P321060 | CHIP CAPACITOR | SL50V 15pF-J |
| C 2D3 | 154P333030 | CHIP CAPACITOR | CH50V 82pF-J |
| C 2D7 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 2D9 | 154P334090 | CHIP CAPACITOR | CH50V 390pF-J |
| C 2E1 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 2E2 | 154P333010 | CHIP CAPACITOR | CH50V 68pF-J |
| C 2E3 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J |
| C 2E5 | 154P334090 | CHIP CAPACITOR | CH50V 390pF-J |
| C 2E6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2E7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2E8 | 154P332010 | CHIP CAPACITOR | CH50V 27pF-J |
| C 2E9 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C |
| C 2F0 | 154P332050 | CHIP CAPACITOR | CH50V 39pF-J |
| C 2F1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2F3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2F4 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C |
| C 2F5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2F6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2F7 | 154P332050 | CHIP CAPACITOR | CH50V 39pF-J |
| C 2G0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2G1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2G2 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 2G4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2G5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2G7 | 154P323080 | CHIP CAPACITOR | SL50V 120pF-J |
| C 2G8 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J |
| C 2G9 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 2H0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2H1 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 2H2 | 154P335070 | CHIP CAPACITOR | CH50V 820pF-J |
| C 2H3 | 154P334030 | CHIP CAPACITOR | CH50V 220pF-J |
| C 2H4 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 2H6 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2H8 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2J0 | 154P333030 | CHIP CAPACITOR | CH50V 82pF-J |
| C 2J1 | 154P331030 | CHIP CAPACITOR | CH50V 12pF-J |
| C 2J2 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2J3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2J4 | 154P333090 | CHIP CAPACITOR | CH50V 150pF-J |
| C 2J5 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 2J6 | 154P333030 | CHIP CAPACITOR | CH50V 82pF-J |
| C 2J8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2J9 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2K0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2K1 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 2K2 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 2K3 | 154P335030 | CHIP CAPACITOR | CH50V 560pF-J |
| C 2K4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2K5 | 154P334070 | CHIP CAPACITOR | CH50V 330pF-J |
| C 2K7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2K8 | 154P332030 | CHIP CAPACITOR | CH50V 33pF-J |
| C 2K9 | 141P131030 | CHIP CAPACITOR | B50V 2200pF-K |
| C 2L0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2L1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2L2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2L3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2L4 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 2L5 | 154P331030 | CHIP CAPACITOR | CH50V 12pF-J |
| C 2L6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2L7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2L8 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C |
| C 2L9 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2M0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2M1 | 154P332010 | CHIP CAPACITOR | CH50V 27pF-J |
| C 2M2 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2M3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2M4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2M7 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2M8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2M9 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2N0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2N1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2N2 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 2N3 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J |
| C 2N4 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2N5 | 154P332010 | CHIP CAPACITOR | CH50V 27pF-J |
| C 2N8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2P0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2P4 | 154P333070 | CHIP CAPACITOR | CH50V 120PJ |
| C 2Q0 | 154P322040 | CHIP CAPACITOR | SL50V 33pF-J |
| C 2Q1 | 154P323020 | CHIP CAPACITOR | SL50V 68pF-J |
| C 2U0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2U2 | 154P334010 | CHIP CERAMIC | CH50V 180pF-J |
| C 2U4 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 2U5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2U7 | 154P335010 | CHIP CAPACITOR | CH50V 470pF-J |
| C 2U8 | 154P334010 | CHIP CAPACITOR | SL50V 180pF-J[A, E, IR, NZ, Y] |
| C 2U8 | 154P334050 | CHIP CAPACITOR | CH50V 270pF-J [G] |
| C 2V0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2W0 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 2W1 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J |
| C 2Z9 | 154P323000 | CHIP CAPACITOR | SL50V 56pF-J [G] |
| C 2007 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2010 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2015 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2016 | 154P331050 | CHIP CAPACITOR | CH50V 15pF-J |
| C 2017 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 2018 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 2021 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2026 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2030 | 154P326080 | CHIP CAPACITOR | SL50V 2200P |
| C 2032 | 154P334070 | CHIP CAPACITOR | CH50V 330pF-J |
| C 2033 | 154P327020 | CHIP CAPACITOR | SL50V 3300pF-J |
| C 2035 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2036 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 2037 | 154P331000 | CHIP CAPACITOR | CH50V 9pF-C |
| C 2038 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 2039 | 154P335090 | CHIP CAPACITOR | CH50V 1000pF-J |
| C 2041 | 154P332050 | CHIP CAPACITOR | CH50V 39pF-J |
| C 2042 | 154P331070 | CHIP CAPACITOR | CH50V 18pF-J |
| C 2043 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 2044 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C |
| C 302 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 303 | 141P130050 | CHIP CAPACITOR | B50V 470pF-K |
| C 304 | 141P130050 | CHIP CAPACITOR | B50V 470pF-K |
| C 305 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 307 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 308 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 309 | 141P131050 | CHIP CAPACITOR | B50V 3300pF-K |
| C 310 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 311 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 314 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 316 | 141P135080 | CHIP CAPACITOR | F25V0.1μF-Z |
| C 317 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 318 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 320 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 322 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 324 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 327 | 154P323020 | CHIP CAPACITOR | SL50V 68pF-J |
| C 3A1 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3A2 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 3A3 | 141P130060 | CHIP CAPACITOR | B50V 560pF-K |
| C 3A8 | 141P130080 | CHIP CAPACITOR | B50V 820pF-K |
| C 3C3 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 3C4 | 141P130040 | CHIP CAPACITOR | B50V 390pF-K |
| C 3D3 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3D5 | 154P325000 | CHIP CAPACITOR | SL50V 390pF-J |
| C 3F0 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K [G] |
| C 3F1 | 141P131050 | CHIP CAPACITOR | B50V 3300pF-K |
| C 3F2 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 3W0 | 172P311030 | CHIP CAPACITOR | 25V 0.01μF-J |
| C 3W1 | 172P311030 | CHIP CAPACITOR | 25V 0.01μF-J |
| C 3Z0 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [G] |
| C 3Z1 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [G] |
| C 3Z2 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [G] |
| C 3Z3 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [G] |
| C 3Z4 | 172P310070 | CHIP CAPACITOR | 25V 3300pF-J |
| C 3Z5 | 172P310070 | CHIP CAPACITOR | 25V 3300pF-J |
| C 3Z6 | 172P310070 | CHIP CAPACITOR | 25V 3300pF-J |
| C 3Z7 | 172P310070 | CHIP CAPACITOR | 25V 3300pF-J |
| C 3Z8 | 172P311030 | CHIP CAPACITOR | 25V 0.01μF-J |
| C 3Z9 | 172P311030 | CHIP CAPACITOR | 25V 0.01μF-J |
| C 3317 | 141P131010 | CHIP CAPACITOR | B50V 1500pF-K |
| C 3318 | 141P131010 | CHIP CAPACITOR | B50V 1500pF-K |
| C 3383 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3384 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3385 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3386 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3398 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 3401 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3403 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3406 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3407 | 154P326000 | CHIP CAPACITOR | SL50V 1000pF-J |
| C 3408 | 154P326000 | CHIP CAPACITOR | SL50V 1000pF-J |
| C 3409 | 154P326000 | CHIP CAPACITOR | SL50V 1000pF-J |
| C 3410 | 154P326000 | CHIP CAPACITOR | SL50V 1000pF-J |
| C 3463 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3561 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3562 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3563 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3564 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 3567 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z |
| C 5B4 | 189P097020 | C-LYTIC-DBL-LAYER | FYD0H473Z |
| C 6A0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6A1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6A2 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6A4 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 6A5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6A6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6A8 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 6B0 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| C 6B1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C5 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 6C6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6C9 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6D1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6D2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6D4 | 154P333050 | CHIP CAPACITOR | CH50V 100pF-J |
| C 6D6 | 154P330060 | CHIP CAPACITOR | CH50V 5pF-C |
| C 6D7 | 154P335090 | CHIP CAPACITOR | CH50V 1000pF-J |
| C 6E0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6E6 | 154P335010 | CHIP CAPACITOR | CH50V 470pF-J |
| C 6E7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6F1 | 154P335010 | CHIP CAPACITOR | CH50V 470pF-J |
| C 6F2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6F4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6F5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6F6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6F7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6F8 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6G0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6G9 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6H8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6J1 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6J3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K [E, G, Y] |
| C 6J8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K [E, G, Y] |
| C 6K0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6K3 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6K4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6K5 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6K6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6K8 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6L0 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6L1 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J |
| C 6L2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6L3 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6P0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6P1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6P2 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6P4 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6P5 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6P6 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6P7 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6P8 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6P9 | 154P324000 | CHIP CAPACITOR | SL50V 150pF-J |
| C 6Q1 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6Q2 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6Q3 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6Q5 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6Q6 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6Q7 | 154P321040 | CHIP CAPACITOR | SL50V 12pF-J |
| C 6S0 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6S1 | 154P320060 | CHIP CAPACITOR | SL50V 4pF-C |
| C 6T0 | 154P323080 | CHIP CAPACITOR | SL50V 120pF-J |
| C 6002 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6003 | 154P333090 | CHIP CAPACITOR | CH50V 150pF-J |
| C 6004 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6005 | 154P333090 | CHIP CAPACITOR | CH50V 150pF-J |
| C 6006 | 154P335090 | CHIP CAPACITOR | CH50V 1000pF-J |
| C 6007 | 154P333010 | CHIP CAPACITOR | CH50V 68pF-J |
| C 6010 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6011 | 141P139010 | CHIP CAPACITOR | B25V 0.068μF-K |
| C 6014 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6016 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6017 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6020 | 141P139010 | CHIP CAPACITOR | B25V 0.068μF-K |
| C 6021 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6022 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6024 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6025 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6026 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6027 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6028 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6029 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6030 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6031 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6032 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6033 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6034 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 6035 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6036 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6037 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 6038 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6039 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 6040 | 154P322080 | CHIP CAPACITOR | SL50V 47pF-J |
| C 700 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 701 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 702 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 704 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 705 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 707 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 708 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 709 | 141P136010 | CHIP CAPACITOR | F25V 0.47μF-Z |
| C 710 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 711 | 141P136010 | CHIP CAPACITOR | F25V 0.47μF-Z |
| C 712 | 141P136010 | CHIP CAPACITOR | F25V 0.47μF-Z |
| C 713 | 141P130090 | CHIP CAPACITOR | B50V 1000pF-K |
| C 714 | 141P136010 | CHIP CAPACITOR | F25V 0.47μF-Z |
| C 715 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 717 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 720 | 154P327060 | CHIP CAPACITOR | CH50V 4700pF-J |
| C 723 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 724 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 728 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 729 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 730 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 731 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 732 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 734 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 735 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J |
| C 736 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 738 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 739 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 740 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 741 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 742 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 743 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 745 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 746 | 141P132010 | CHIP CAPACITOR | B50V 0.01μF-K |
| C 748 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 749 | 141P139030 | CHIP CAPACITOR | B25V 0.1μF-K |
| C 762 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J |
| C 7A0 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7A1 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7A2 | 154P324000 | CHIP CAPACITOR | SL50V 150pF-J [E, IR, NZ] |
| C 7A3 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[A, G, Y] |
| C 7A4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7A5 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7A6 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7B0 | 154P330060 | CHIP CAPACITOR | CH50V 5pF-C [E, IR, NZ] |
| C 7B1 | 154P331070 | CHIP CAPACITOR | CH50V 18pF-J [E, NZ] |
| C 7B1 | 154P332070 | CHIP CAPACITOR | CH50V 47pF-J [IR] |
| C 7B2 | 154P323000 | CHIP CAPACITOR | SL50V 56pF-J [IR] |
| C 7B2 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J [E, NZ] |
| C 7B4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7B5 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7B6 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7B7 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7C0 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7C1 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7C3 | 154P323000 | CHIP CAPACITOR | SL50V 56pF-J [E, IR, NZ] |
| C 7C5 | 154P323000 | CHIP CAPACITOR | SL50V 56pF-J [E, IR, NZ] |
| C 7C6 | 154P332090 | CHIP CAPACITOR | CH50V 56pF-J [E, IR, NZ] |
| C 7C7 | 154P323060 | CHIP CAPACITOR | SL50V 100pF-J [E, IR, NZ] |
| C 7C8 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7C9 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [E, IR, NZ] |
| C 7D3 | 154P324040 | CHIP CAPACITOR | SL50V 220pF-J [E, IR, NZ] |
| C 7D4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7D6 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7D7 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7E0 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7E4 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C [E, IR, NZ] |
| C 7E5 | 154P331010 | CHIP CAPACITOR | CH50V 10pF-C [E, IR, NZ] |
| C 7E7 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z[E, IR, NZ] |
| C 7H5 | 154P321080 | CHIP CAPACITOR | SL50V 18pF-J [E, IR, NZ] |
| C 7K0 | 154P324000 | CHIP CAPACITOR | SL50V 150pF-J [E, IR, NZ] |
| C 7K1 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J [E, IR, NZ] |
| C 7K4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [IR] |
| C 7K5 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [IR] |
| C 7K7 | 154P322060 | CHIP CAPACITOR | SL50V 39pF-J [IR] |
| C 7Y4 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 7Y7 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 7Y8 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 7Y9 | 154P324080 | CHIP CAPACITOR | SL50V 330pF-J [E, NZ] |
| C 7Z1 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 7Z3 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 7Z5 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 7Z8 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [E, NZ] |
| C 8B0 | 141P133080 | CHIP CAPACITOR | F50V 0.01μF-Z [G] |
| C 8B5 | 154P321000 | CHIP CAPACITOR | SL50V 8pF-C [G] |
| C 916 | 185D060090 | ELECTROLYTIC CAPACITOR | H16V 8200μF-M |
| C 917 | 185D065020 | ELECTROLYTIC CAPACITOR | H25V 6800μF-M |
| VC501 | 202P109040 | TRIMMER CAPACITOR | 7.3pF-45P |
| VC6D8 | 202P109040 | TRIMMER CAPACITOR | 7.3pF-45P |
| VC6K1 | 202P109050 | TRIMMER CAPACITOR | 9.8pF-60P |
| VC7A0 | 202P109030 | TRIMMER CAPACITOR | 5.5pF-30pF [E, IR, NZ] |
| VC7A1 | 202P109030 | TRIMMER CAPACITOR | 5.5pF-30pF [E, IR, NZ] |
| VC801 | 202P109020 | TRIMMER CAPACITOR | 4.2pF-20pF |

## SWITCHES

| | | | |
|---|---|---|---|
| S 200 | 431C073010 | SLIDE SWITCH | EURO AV SELECT |
| ○S 803 | 431C079020 | SLIDE SWITCH | S-VHS SWITCH |
| S 806 | 431C079040 | SLIDE SWITCH | AV INPUT SELECT |
| ○S 809 | 431C079020 | SLIDE SWITCH | FRONT/REAR SELECT |
| S 810 | 431C079010 | SLIDE SWITCH | TARE REMAIN |
| S 811 | 431C079040 | SLIDE SWITCH | METER SELECT |
| S 862 | 431C079040 | SLIDE SWITCH | INTELLIGENT PICTURE |
| S 8A1 | 432P100040 | KEY BOARD SWITCH | POWER |
| SW570 | 439P019010 | MODE SELECT SWITCH | |
| SW571 | 439P020010 | LIMIT SWITCH | |
| ○SW572 | 439P020020 | LIMIT SWITCH | |

## MISCELLANEOUS

| | | | | |
|---|---|---|---|---|
| | 295P275010 | RF CONVERTER | | [A] |
| | 295P087050 | RF CONVERTER | MDLK6D543A | [E, G, Y] |
| | 295P087040 | RF CONVERTER | MDLK6B453A | [IR] |
| | 295P275020 | RF CONVERTER | | [NZ] |
| | 242D297090 | IF CABLE | | |
| F 901 | 283D024010 | FUSE | 1A-T | |
| F 902 | 283D024090 | FUSE | 2.5A-T | |
| F 903 | 283D024090 | FUSE | 2.5A-T | |
| J 101 | 451P032010 | PIN JACK | | [E, NZ] |
| J 201 | 451C096020 | PIN JACK | YEL | |
| J 202 | 449C087010 | SOCKET DIN MINI | 4P | |

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| J 203 | 451C096020 | PIN JACK | YEL |
| J 204 | 449C087010 | SOCKET DIN MINI | 4P |
| J 3Z0 | 451C133010 | PIN JACK(2P) | |
| | 451C134010 | PIN JACK(2P) | [A, E, IR, NZ, Y] |
| J 3Z2 | 451C086090 | PIN JACK | [G] |
| J 3Z3 | 451C086010 | PIN JACK | [G] |
| J 3Z4 | 451C086090 | PIN JACK | [G] |
| J 3Z5 | 451C086010 | PIN JACK | [G] |
| J 3Z6 | 451C058010 | CONNECTOR | 21P |
| J 5A1 | 451C118050 | PIN JACK | BLK |
| J 5A2 | 449C104010 | DIN SOCKET | 9P [G] |
| K 3A0 | 287P020050 | RELAY | |
| M 470 | 288P093020 | CAPSTAN MOTOR | |
| M 570 | 288P088010 | DRUM MOTOR | |
| M 571 | 288D025010 | LOADING MOTOR | |
| T 370 | 460P060050 | HEAD | |
| T 371 | 460P061020 | FE HEAD | |
| TU101 | 295P060060 | TUNER VIF PACK | VP-5D [A] |
| TU101 | 295P060030 | TUNER VIF PACK | VP-5D [E, NZ] |
| TU101 | 295P060020 | TUNER VIF PACK | VP-5D [G, Y] |
| TU101 | 295P060040 | TUNER VIF PACK | VP-5D [IR] |
| V 801 | 253P068050 | TUBE FLUOR | FIP12HM8A |
| X 501 | 285P084010 | CRYSTAL RESONATOR | |
| X 6C0 | 285P011010 | CRYSTAL RESONATOR | 4. 434MHz |
| X 7A0 | 285P115010 | CRYSTAL RESONATOR | 6. 552 [IR] |
| X 7A0 | 285P086010 | CRYSTAL RESONATOR | [E, NZ] |
| X 7A1 | 285P113020 | CRYSTAL RESONATOR | [E, IR, NZ] |
| X 7A2 | 285P094010 | CRYSTAL RESONATOR | [E, IR, NZ] |
| X 801 | 285P063040 | CRYSTAL RESONATOR | 4. 194304MHz |
| X 802 | 285P054010 | CRYSTAL RESONATOR | 32. 768kHz |
| Z 8A0 | 939P359010 | PREAMP UNIT | |
| CD AD | 243C048080 | CARD LEAD | 13P |
| CJ AJ | 243C048020 | CARD LEAD | 17P |
| CK SK | 243C023030 | CARD LEADD | 23P |
| DC CC | 243C061020 | CARD LEAD | 9P |
| DM CM | 243C061050 | CARD LEAD | 23P |

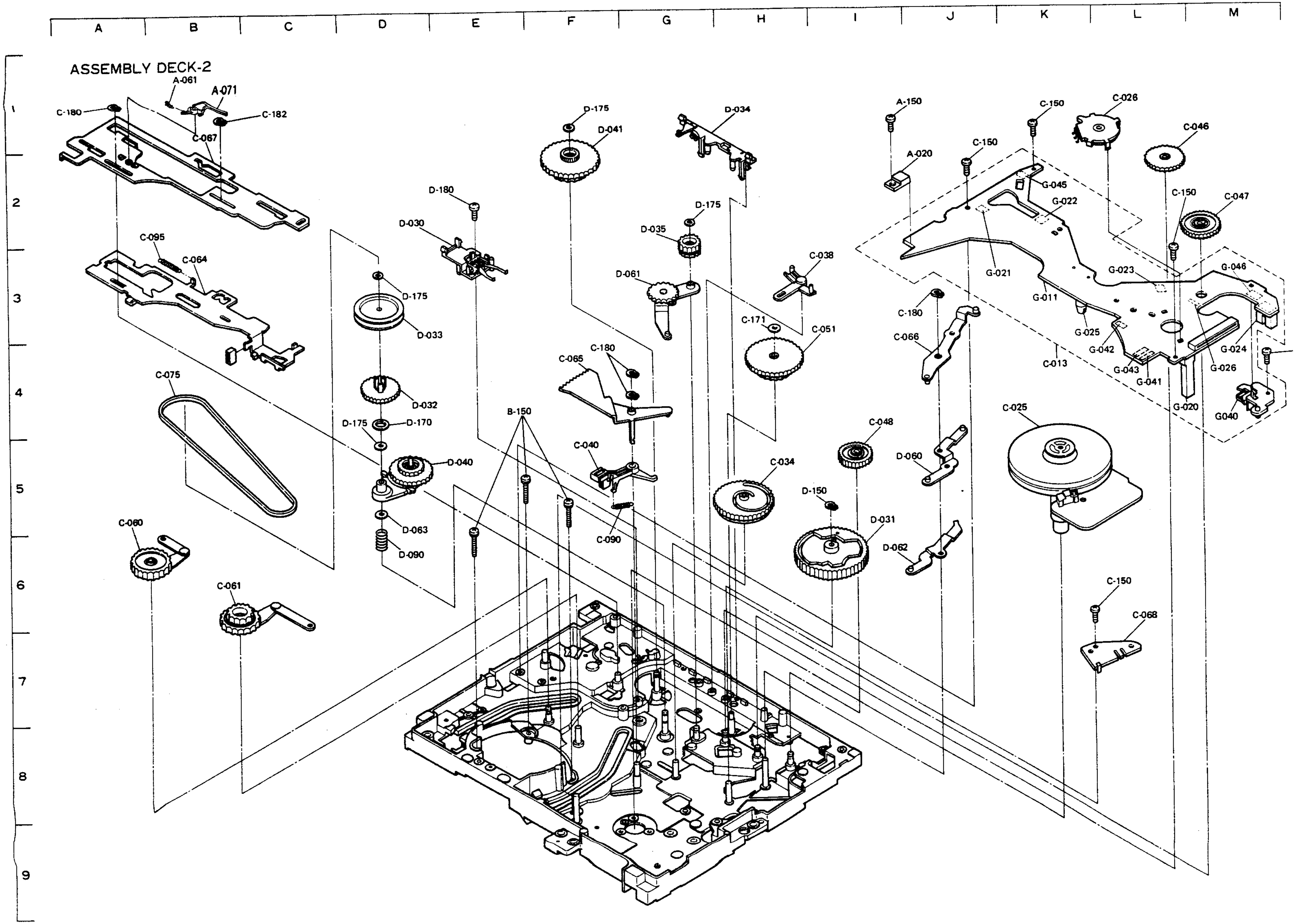
## PRINTED CIRCUIT BOARD ASSY'S

| SYMBOL NO. | PARTS NO. | PARTS NAME | DESCRIPTION |
|---|---|---|---|
| | 928C638001 | CONNECTOR PCB ASSY | [A, E, IR, NZ, Y] |
| | 928C639001 | CONNECTOR PCB ASSY | [G] |
| | 928B992004 | CONTROL PCB ASSY | [A, NZ] |
| | 928B992002 | CONTROL PCB ASSY | [E, IR, Y] |
| | 928B992003 | CONTROL PCB ASSY | [G] |
| | 928C510030 | DECK PCB ASSY | |
| | 928B927012 | HEAD-AMP PCB ASSY | [A, E, NZ, Y] |
| | 928B927013 | HEAD-AMP PCB ASSY | [G] |
| | 928B927011 | HEAD-AMP PCB ASSY | [IR] |
| | 928B997003 | Hi-Fi/DEC PCB ASSY | [A] |
| | 928B997002 | Hi-Fi/DEC PCB ASSY | [G] |
| | 928B997001 | Hi-Fi/DEC PCB ASSY | [Y] |
| | 928B996002 | Hi-Fi/NICAM PCB ASSY | [E] |
| | 928B996004 | Hi-Fi/NICAM PCB ASSY | [IR] |
| | *928B996003* | *Hi-Fi/NICAM PCB ASSY* | *[NZ]* |
| | 928C635006 | JACK-F PCB ASSY | [A] |
| | 928C635004 | JACK-F PCB ASSY | [E] |
| | 928C635005 | JACK-F PCB ASSY | [G] |
| | 928C635003 | JACK-F PCB ASSY | [IR] |
| | 928C635007 | JACK-F PCB ASSY | [NZ] |
| | 928C635002 | JACK-F PCB ASSY | [Y] |
| | 928B991004 | SIGNAL PCB ASSY | [A, NZ] |
| | 928B991002 | SIGNAL PCB ASSY | [E, Y] |
| | 928B991003 | SIGNAL PCB ASSY | [G] |
| | 928B991001 | SIGNAL PCB ASSY | [IR] |
| | 928B993006 | TIMER/P-SW PCB ASSY | [A] |
| | 928B993004 | TIMER/P-SW PCB ASSY | [E] |
| | 928B993005 | TIMER/P-SW PCB ASSY | [G] |
| | 928B993003 | TIMER/P-SW PCB ASSY | [IR] |
| | 928B993007 | TIMER/P-SW PCB ASSY | [NZ] |
| | 928B993002 | TIMER/P-SW PCB ASSY | [Y] |
| | 928C636006 | TU-VIF PCB ASSY | [A] |
| | 928C636004 | TU-VIF PCB ASSY | [E] |
| | 928C636005 | TU-VIF PCB ASSY | [G] |
| | 928C636003 | TU-VIF PCB ASSY | [IR] |
| | 928C636007 | TU-VIF PCB ASSY | [NZ] |
| | 928C636002 | TU-VIF PCB ASSY | [Y] |
| | 928B995002 | POWER PCB ASSY | [A, E, IR, NZ, Y] |
| | 928B995003 | POWER PCB ASSY | [G] |
| | 928C637001 | REG PCB ASSY | |
| | 928C442050 | DB PCB ASSY | |

* Settelled Service Parts

| ITEM | PARTS No. | * | ADDRESS | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|
| B-150 | 669D200040 | | E-4 | SCREW-SEMS | M2. 6X0. 45-10 | 03 |
| D-030 | 641B310010 | ○ | D-2 | UNIT-LEVER-SHIFT | | 01 |
| D-031 | 641B323010 | ○ | I-5 | CAM-MAIN-1 | | 01 |
| D-032 | 641C789020 | ○ | D-4 | PULLEY-GEAR | | 01 |
| D-033 | 641C790010 | ○ | D-3 | PULLEY-BELT | | 01 |
| D-034 | 641C815010 | | H-1 | HOLDER-P-CAM | | 01 |
| D-035 | 621D516010 | ○ | G-2 | GEAR-F/L-1 | | 01 |
| D-040 | 522C077020 | ○ | E-5 | UNIT-GEAR-IDLER | | 01 |
| D-041 | 522C083010 | ○ | F-1 | UNIT-GEAR-REEL-S | | 01 |
| D-060 | 591B559010 | | J-5 | LEVER-C | | 01 |
| D-061 | 591B567010 | ○ | G-3 | LEVER-F/L-ID | | 01 |
| D-062 | 592C830010 | | I-6 | LEVER-RS | | 01 |
| D-063 | 596D057010 | ○ | D-5 | WASHER-R | T=0. 3 | 01 |
| D-090 | 572D306010 | ○ | D-6 | SPRING-SHIFT | | 01 |
| D-150 | 685C009010 | ○ | I-5 | GRIP-RING | | 01 |
| D-170 | 552C010040 | ○ | D-4 | WASHER-THRUST | 6. 7X12X0. 13 | 01 |
| D-175 | 552C007030 | ○ | D-3 D-4<br>G-2 F-1 | CUT-WASHER | 2. 5 | 04 |
| D-180 | 669D227010 | ○ | E-2 | SCREW-TS | M2. 6X6 | 01 |
| C-013 | 928C510030 | ○ | K-4 | ASSY-PCB-DECK | | 01 |
| G-011 | 240A651030 | | K-3 | PCB-DECK | | 01 |
| G-020 | 268P014020 | ○ | L-4 | TRASISTOR | Q571 PN205L-(NC) | 01 |
| G-021 | 268P014020 | ○ | J-3 | TRASISTOR | Q572 PN205L-(NC) | 01 |
| G-022 | 268P044010 | ○ | K-2 | PHOTO-INTERRUPTER | Q573 ON2270-(LJ) | 01 |
| G-023 | 268P044010 | ○ | L-3 | PHOTO-INTERRUPTER | Q574 ON2270-(LJ) | 01 |
| G-024 | 268P045010 | ○ | M-4 | PHOTO-INTERRUPTER | Q575 GP1L52V | 01 |
| G-025 | 264P307020 | ○ | K-3 | DIODE-LE | D570 GL-451 | 01 |
| G-026 | 264P515010 | ○ | M-4 | DIODE | D571 MA165 | 01 |
| G-040 | 299P124010 | ○ | M-4 | LATCH-MAGNET | L570 | 01 |
| G-045 | 439P020010 | ○ | K-2 | SW-LIMIT | SW571 | 01 |
| G-046 | 439P020020 | ○ | M-3 | SW-LIMIT | SW572 | 01 |
| C-025 | 288P093020 | ○ | K-4 | MOTOR-CP | M470 | 01 |
| C-026 | 439P019010 | ○ | L-1 | SW-MODE-SELECT-F | SW570 | 01 |
| C-034 | 641B324010 | ○ | H-5 | CAM-MAIN-2 | | 01 |
| C-038 | 641C795010 | | I-3 | LEVER-IDLER-S | | 01 |
| C-040 | 641C800010 | ○ | F-5 | BRAKE-CP | | 01 |
| C-046 | 621D517010 | ○ | M-1 | GEAR-F/L-2 | | 01 |
| C-047 | 621D518010 | ○ | M-2 | GEAR-F/L-3 | | 01 |
| C-048 | 621D519010 | ○ | I-4 | GEAR-F/L-4 | | 01 |
| C-051 | 522C078040 | ○ | I-3 | UNIT-GEAR-REEL | | 01 |
| C-060 | 591B543010 | ○ | A-5 | ARM-LOAD-S | | 01 |
| C-061 | 591B544010 | ○ | B-6 | ARM-LOAD-T | | 01 |
| C-064 | 591B554010 | | B-3 | PLATE-CAM-C | | 01 |
| C-065 | 591B557010 | | F-4 | ARM-GEAR-LOAD | | 01 |
| C-066 | 591B558010 | | J-4 | LEVER-B | | 01 |
| C-067 | 592C949010 | | B-1 | UNIT-PLATE-CAM-B3 | | 01 |
| C-068 | 596D186010 | | L-7 | PLATE-SHIELD-F | | 01 |
| C-075 | 521D062010 | ○ | B-4 | BELT-REEL | | 01 |
| C-090 | 572D308020 | ○ | F-6 | SPRING-B-CP | | 01 |
| C-095 | 572D313010 | ○ | B-2 | SPRING-CAM-C | | 01 |
| C-150 | 669D227010 | ○ | J-2 K-1<br>L-2 L-6<br>M-4 | SCREW-TS | M2. 6X6 | 05 |
| C-171 | 552C006020 | ○ | H-3 | WASHER-THRUST | 2. 0X0. 13 | 01 |
| C-180 | 685C009010 | ○ | A-1 F-4<br>J-3 | GRIP-RING | | 04 |
| C-182 | 552C009050 | | C-1 | CUT-WASHER | | 01 |
| A-020 | 260P438010 | ○ | J-2 | TRANSISTOR | Q971 2SD1273-Q | 01 |
| A-061 | 572D404010 | | B-1 | SPRING-B-RS | | 01 |
| A-071 | 641C928010 | | B-1 | LEVER-B-RS | | 01 |
| A-150 | 669D227010 | ○ | J-1 | SCREW-TS | M2. 6X6 | 01 |

## ASSEMBLY DECK-2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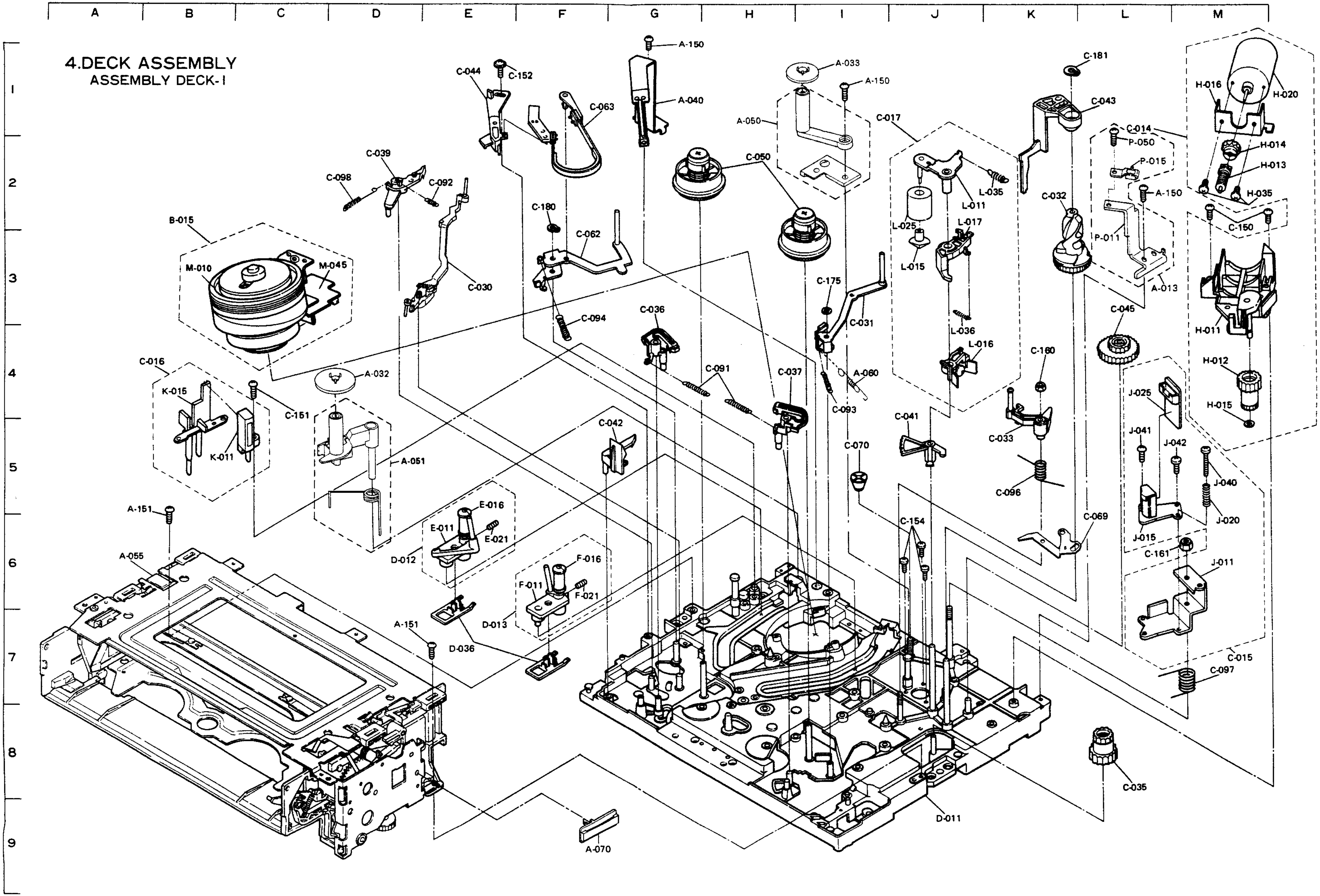
G-025
G-042
C-013
G-043
G-041
G-024
G-026
C-150
G-020
G040
D-060
D-062
C-025
C-150
C-068

# 4.DECK ASSEMBLY

## ASSEMBLY DECK-1



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C-152
C-063
A-040
A-033
A-150
A-050
C-017
C-181
C-043
H-016
H-020
C-014
P-050
H-014
P-015
H-013
A-150
H-035
C-150
C-039
C-098
C-092
C-180
C-062
C-050
L-035
L-011
L-025
L-017
L-015
C-032
P-011
A-013
B-015
M-010
M-045
C-030
C-094
C-175
C-031
L-036
L-016
C-045
H-011
C-036
C-091
C-037
A-060
C-093
C-160
H-012
C-016
K-015
C-151
K-011
A-032
A-051
C-042
C-041
C-070
C-033
J-025
H-015
J-041
J-042
J-040
C-096
J-020
J-015
C-069
C-154
E-016
E-011
E-021
D-012
A-151
A-055
F-016
F-011
F-021
D-013
C-161
J-011
A-151
D-036
C-015
C-097
C-035
D-011
A-070

∗ Settelled Service Parts

| ITEM | PARTS No. | ∗ | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| B-015 | 9488277001 | ○ | B-2 | | ASSY-DRUM | | 01 |
| M-010 | 9288999021 | ○ | B-3 | | ASSY-UPPER-DRUM | | 01 |
| M-045 | 288P088010 | ○ | D-3 | | MOTOR-DRUM | M570 | 01 |
| D-011 | 948A071020 | | J-9 | | ASSY-MAIN-PLATE | | 01 |
| D-012 | 948D018070 | ○ | D-6 | | ASSY-TAPE-GUIDE-S | | 01 |
| D-012 | 948D018080 | ○ | D-6 | | ASSY-TAPE-GUIDE-S | | 01 |
| D-012 | 948D018090 | ○ | D-6 | | ASSY-TAPE-GUIDE-S | | 01 |
| E-011 | 635B059010 | ○ | E-6 | | TAPE-GUIDE-S | | 01 |
| E-011 | 635B059020 | ○ | E-6 | | TAPE-GUIDE-S | | 01 |
| E-011 | 635B059030 | ○ | E-6 | | TAPE-GUIDE-S | | 01 |
| E-016 | 522B031010 | ○ | E-5 | | GUIDE-ROLLER | | 01 |
| E-021 | 669D197020 | | E-6 | | SET-SCREW-F | M3X0. 5-4 | 01 |
| D-013 | 948D019010 | ○ | F-7 | | ASSY-TAPE-GUIDE-T | | 01 |
| D-013 | 948D019020 | ○ | F-7 | | ASSY-TAPE-GUIDE-T | | 01 |
| D-013 | 948D019030 | ○ | F-7 | | ASSY-TAPE-GUIDE-T | | 01 |
| F-011 | 635B060010 | ○ | F-6 | | TAPE-GUIDE-T | | 01 |
| F-011 | 635B060020 | ○ | F-6 | | TAPE-GUIDE-T | | 01 |
| F-011 | 635B060030 | ○ | F-6 | | TAPE-GUIDE-T | | 01 |
| F-016 | 522B031010 | ○ | F-6 | | GUIDE-ROLLER | | 01 |
| F-021 | 669D197020 | | F-6 | | SET-SCREW-F | M3X0. 5-4 | 01 |
| D-036 | 621D522010 | ○ | E-7 | | SLIDER | | 02 |
| C-014 | 928D031010 | ○ | L-2 | | ASSY-LOAD-MOTOR | | 01 |
| H-011 | 641B313010 | | M-4 | | HOLDER-MOTOR | | 01 |
| H-012 | 641C783010 | | M-4 | | GEAR-WHEEL | | 01 |
| H-013 | 641C801010 | | M-2 | | GEAR-WORM | | 01 |
| H-014 | 621D525010 | | M-2 | | COUPLING | | 01 |
| H-015 | 552C007030 | ○ | M-4 | | CUT-WASHER | 2. 5 | 01 |
| H-016 | 596D157010 | | M-1 | | PLATE-HOLDER-M | | 01 |
| H-020 | 288D025010 | ○ | M-1 | | MOTOR-LOADING | M571 | 01 |
| H-035 | 650P300030 | | M-2 | | SCREW-F-FE-PAN | M3X0. 5-3 | 02 |
| C-015 | 928D032030 | ○ | M-7 | | ASSY-AC-HEAD | | 01 |
| J-011 | 592C760010 | | M-6 | | ARM-AC | | 01 |
| J-015 | 460P060050 | ○ | L-6 | | HEAD-AC | T370 | 01 |
| J-020 | 570D593010 | | M-6 | | SPRING-AC | | 01 |
| J-025 | 215C393010 | | L-4 | | PCB-AC-F | | 01 |
| J-040 | 650P261040 | | M-5 | | SCREW-F-FE-PAN | M2. 6X0. 45-14 | 01 |
| J-041 | 669D227010 | ○ | L-5 | | SCREW-TS | M2. 6X6 | 01 |
| J-042 | 669D206030 | | M-5 | | SCREW | | 01 |
| C-016 | 928D033010 | | B-4 | | ASSY-FE-HEAD | | 01 |
| K-011 | 460P061020 | ○ | B-5 | | HEAD-FE | T371 | 01 |
| K-015 | 641C870010 | | B-4 | | HOLDER-FE | | 01 |
| C-017 | 948D020010 | ○ | J-1 | | ASSY-ARM-PINCH | | 01 |
| L-011 | 591B536010 | | J-2 | | ARM-PINCH | | 01 |
| L-015 | 621D523010 | ○ | J-3 | | CAP-ROLLER | | 01 |
| L-016 | 641C797010 | | J-4 | | LEVER-CAM-PINCH | | 01 |
| L-017 | 641C798010 | | J-3 | | LEVER-ARM-PINCH | | 01 |
| L-025 | 522D174010 | ○ | J-2 | | ROLLER-PINCH | | 01 |
| L-035 | 572D314010 | ○ | K-2 | | SPRING-PINCH | | 01 |
| L-036 | 572D315010 | ○ | J-4 | | SPRING-CAM-PINCH | | 01 |
| C-030 | 641B368010 | ○ | E-3 | | ARM-TENS-REG-S2 | | 01 |
| C-031 | 591B551010 | ○ | I-3 | | ARM-TENS-REG-T | | 01 |
| C-032 | 641B314020 | ○ | K-2 | | CAM-PINCH | | 01 |
| C-033 | 635B068010 | ○ | K-5 | | ARM-TU-G | | 01 |
| C-035 | 641C782010 | ○ | L-8 | | GEAR-JOINT | | 01 |
| C-036 | 641C791010 | ○ | G-3 | | BRAKE-MAIN-S | | 01 |
| C-037 | 641C792010 | ○ | H-4 | | BRAKE-MAIN-T | | 01 |
| C-039 | 641C796010 | | D-2 | | LEVER-TENS | | 01 |
| C-041 | 641C991010 | ○ | J-5 | | ARM-GEAR-TU-G2 | | 01 |

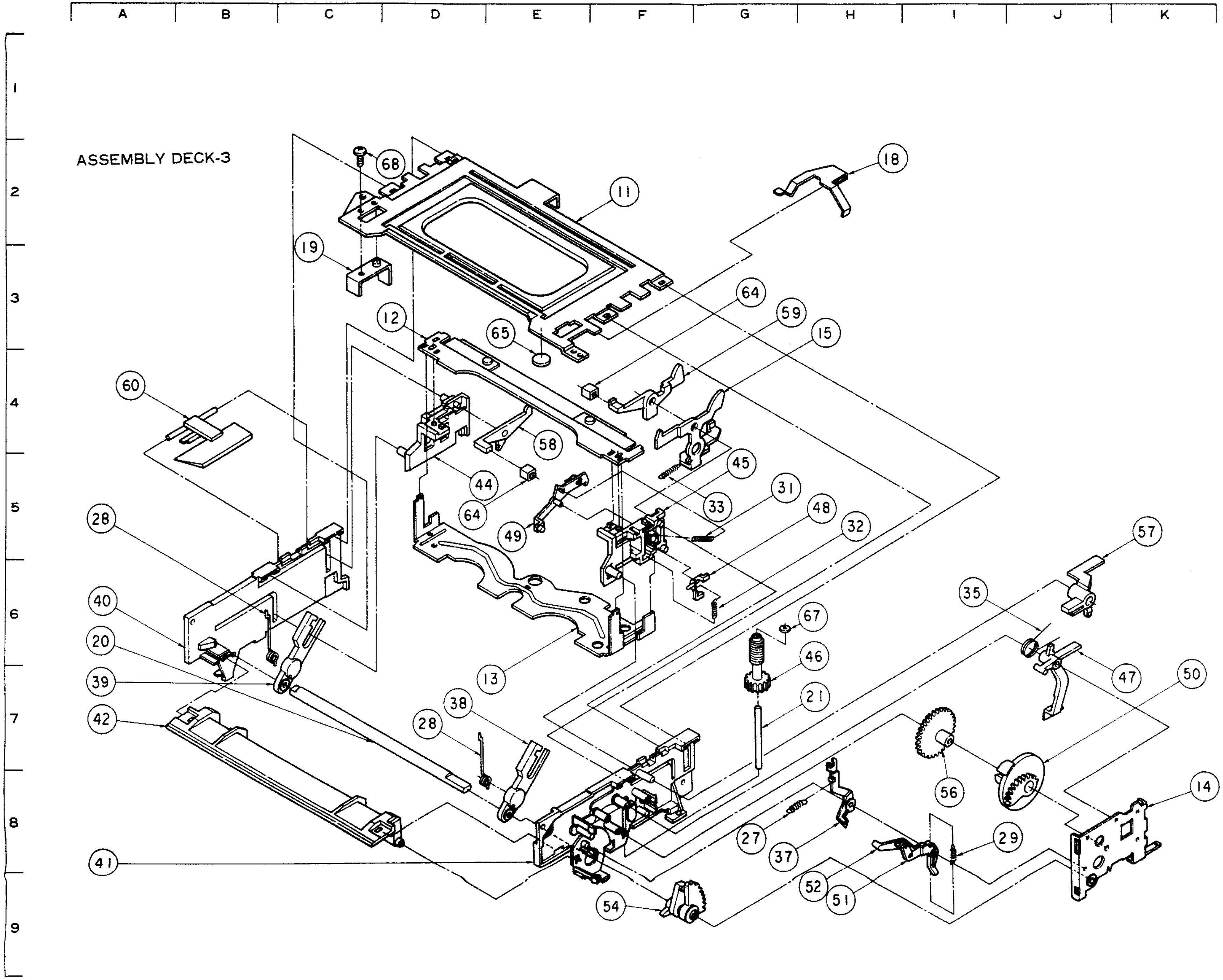
∗ Settelled Service Parts

| ITEM | PARTS No. | ∗ | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| C-042 | 641C804010 | ○ | G-5 | | LEVER-REC-SAFETY | | 01 |
| C-043 | 641C806010 | | L-1 | | CAP-ARM-PINCH | | 01 |
| C-044 | 641C861010 | | E-1 | | HOLDER-T-BAND | | 01 |
| C-045 | 621D509010 | ○ | L-3 | | GEAR-1 | | 01 |
| C-050 | 522C076020 | ○ | H-2 | | UNIT-REEL-DISK | | 02 |
| C-062 | 591B547010 | | F-3 | | ARM-TENSION | | 01 |
| C-063 | 591B552010 | ○ | F-1 | | BELT-TENS-BRAKE | | 01 |
| C-069 | 592C930010 | | L-5 | | LEVER-TENS-TU | | 01 |
| C-070 | 631D136010 | ○ | I-5 | | NUT-TAPER | | 01 |
| C-091 | 572D309010 | ○ | H-4 | | SPRING-M-B | | 02 |
| C-092 | 572D391010 | ○ | E-2 | | SPRING-T-R-S2 | | 01 |
| C-093 | 572D390010 | ○ | I-4 | | SPRING-T-R-T2 | | 01 |
| C-094 | 572D312010 | ○ | F-3 | | SPRING-TENS | | 01 |
| C-096 | 572D317010 | ○ | K-5 | | SPRING-TU-G | | 01 |
| C-097 | 572D318010 | ○ | M-7 | | SPRING-ARM-A/C | | 01 |
| C-098 | 572D328010 | ○ | D-2 | | SPRING-REC-SAFETY | | 01 |
| C-150 | 669D227010 | ○ | M-3 | | SCREW-TS | M2. 6X6 | 02 |
| C-151 | 669D227030 | ○ | C-4 | | SCREW-TS | M2. 6X10 | 01 |
| C-152 | 669D228010 | | E-1 | | SCREW-TS-SEMS | M2. 6X6 | 01 |
| C-154 | 669D285040 | | J-6 | | SCREW-TB-PAN | M2. 6X8 | 03 |
| C-160 | 674D081020 | ○ | K-4 | | NUT-NYLON | | 01 |
| C-161 | 674D100010 | ○ | L-6 | | NUT-NYLON-S | M4X0. 7 | 01 |
| C-175 | 552C007030 | ○ | I-3 | | CUT-WASHER | 2. 5 | 01 |
| C-180 | 685C009010 | ○ | F-2 | | GRIP-RING | | 01 |
| C-181 | 685C009020 | ○ | L-1 | | GRIP-RING | | 01 |
| A-013 | 928D037001 | ○ | L-3 | | ASSY-H/S-G | | 01 |
| P-011 | 592C953010 | | L-3 | | HOLDER-H/S | | 01 |
| P-015 | 299P052020 | ○ | L-2 | | SENSOR-H | | 01 |
| P-050 | 669D227090 | ○ | L-2 | | SCREW-TS | | 01 |
| A-032 | 596D256010 | | D-4 | | FLYWHEEL-IMP | | 01 |
| A-033 | 596D256020 | | I-1 | | FLYWHEEL-IMP | | 01 |
| A-040 | 299C027010 | ○ | G-1 | | BRUSH | | 01 |
| A-050 | 641B382010 | | H-1 | | UNIT-IMP-T | | 01 |
| A-051 | 641B381010 | | D-5 | | UNIT-IMP-S2 | | 01 |
| A-055 | 590A256010 | ○ | A-6 | | UNIT-F/L-F | | 01 |
| A-060 | 572D401010 | | I-4 | | SPRING-RS | | 01 |
| A-070 | 641C906010 | | F-9 | | HOLDER-CARD | | 01 |
| A-150 | 669D227010 | ○ | G-1<br>L-2 | I-1 | SCREW-TS | M2. 6×6 | 03 |
| A-151 | 669D227020 | ○ | B-5 | D-7 | SCREW-TS | M2. 6X8 | 02 |

∗ Settelled Service Parts

| ITEM | PARTS No. | ∗ | ADDRESS | | PARTS NAME | DESCRIPTION | Qt. |
|---|---|---|---|---|---|---|---|
| 11 | 591B545010 | | F-2 | | PLATE-ROOF | | 01 |
| 12 | 592C758010 | | D-3 | | PLATE-UPPER | | 01 |
| 13 | 591B546010 | | E-7 | | PLATE-BOTTOM | | 01 |
| 14 | 591B542010 | | K-8 | | PLATE-SIDE-TU | | 01 |
| 15 | 592C851010 | | H-3 | | LEVER-LOCK-FL | | 01 |
| 18 | 596D150010 | | H-2 | | PLATE-EARTH | | 01 |
| 19 | 596D217010 | | C-3 | | PLATE-GUARD | | 01 |
| 20 | 631D134010 | | A-6 | | SHAFT-FL | | 01 |
| 21 | 631D135010 | | H-7 | | SHAFT-WORM | | 01 |
| 27 | 572D300010 | ○ | G-8 | | SPRING-FL-DOOR | | 01 |
| 28 | 572D301010 | ○ | A-5 | D-7 | SPRING-FL | | 02 |
| 29 | ---- | | | | | | |
| 31 | 572D304010 | | G-5 | | SPRING-OPENER-LID | | 01 |
| 32 | 572D305010 | | H-5 | | SPRING-JUT-FL | | 01 |
| 33 | 572D380010 | | G-5 | | SPRING-LEVER-LOCK | | 01 |
| 35 | 572D367010 | | I-6 | | SPRING-LEVER-SW | | 01 |
| 37 | 621D512010 | ○ | G-8 | | ARM-FL-DOOR | | 01 |
| 38 | 641B315010 | ○ | A-7 | | ARM-FL | | 01 |
| 39 | 641B315020 | ○ | D-7 | | ARM-FL | | 01 |
| 40 | 641A110010 | | A-6 | | HOLDER-SIDE-SP | | 01 |
| 41 | 641A109010 | | A-8 | | HOLDER-SIDE-TU | | 01 |
| 42 | 641B306010 | | A-7 | | GUIDE-INSERT | | 01 |
| 44 | 641B309010 | | D-5 | | HOUSING-CASSETTE | SP | 01 |
| 45 | 641B307010 | | G-5 | | HOUSING-CASSETTE | TU | 01 |
| 46 | 621D513010 | ○ | H-5 | | GEAR-WORM-FL | | 01 |
| 47 | 621D514010 | | K-7 | | LEVER-SW-FL | | 01 |
| 48 | 621D515010 | ○ | H-5 | | JUT | | 01 |
| 49 | 641C794010 | | E-5 | | OPENER-LID-CAS | | 01 |
| 50 | 641C793010 | ○ | K-7 | | GEAR-DRIVE | | 01 |
| 51 | ---- | | | | | | |
| 52 | ---- | | | | | | |
| 54 | 641C858010 | ○ | F-9 | | ARM-LOCK | | 01 |
| 56 | 641C814010 | ○ | I-8 | | GEAR-W-H-F/L | | 01 |
| 57 | 641C857010 | | K-5 | | LEVER-PICK-CAS | | 01 |
| 58 | 621D585010 | | E-4 | | LEVER-CAS-SP | | 01 |
| 59 | 621D586010 | | G-3 | | LEVER-CAS-TU | | 01 |
| 60 | 641C878010 | | A-4 | | STOPPER-SP-FL | | 01 |
| 64 | 642D494010 | | D-5 | G-3 | RUBBER-FL | | 02 |
| 65 | 640D664010 | | E-3 | | CUSHION | | 01 |
| 67 | 552C00104 | | H-6 | | WASHER-THRUST | | 01 |
| 68 | --- | | D-2 | | SCREW 2. 6-5 | | 01 |

## ASSEMBLY DECK-3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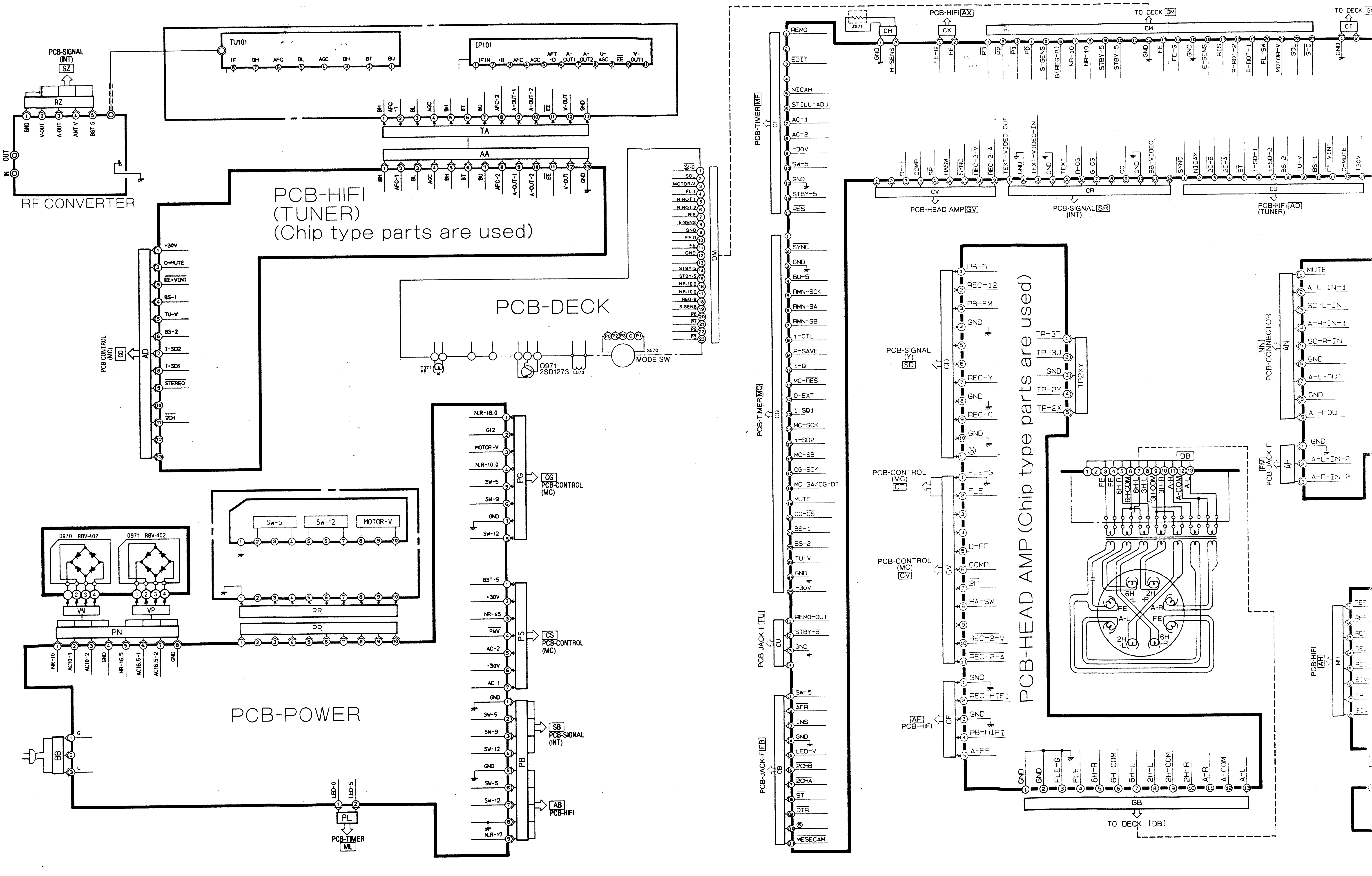
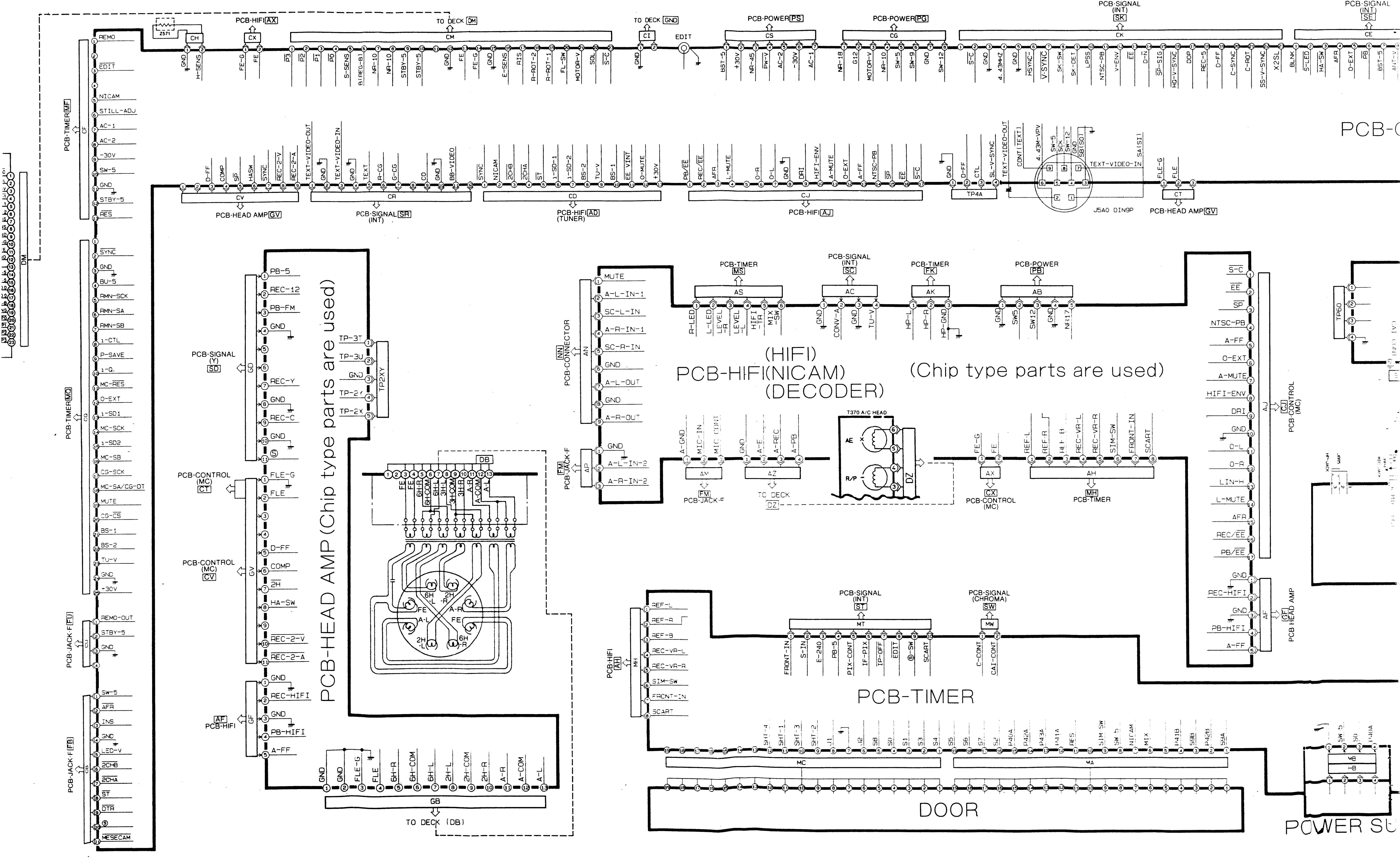
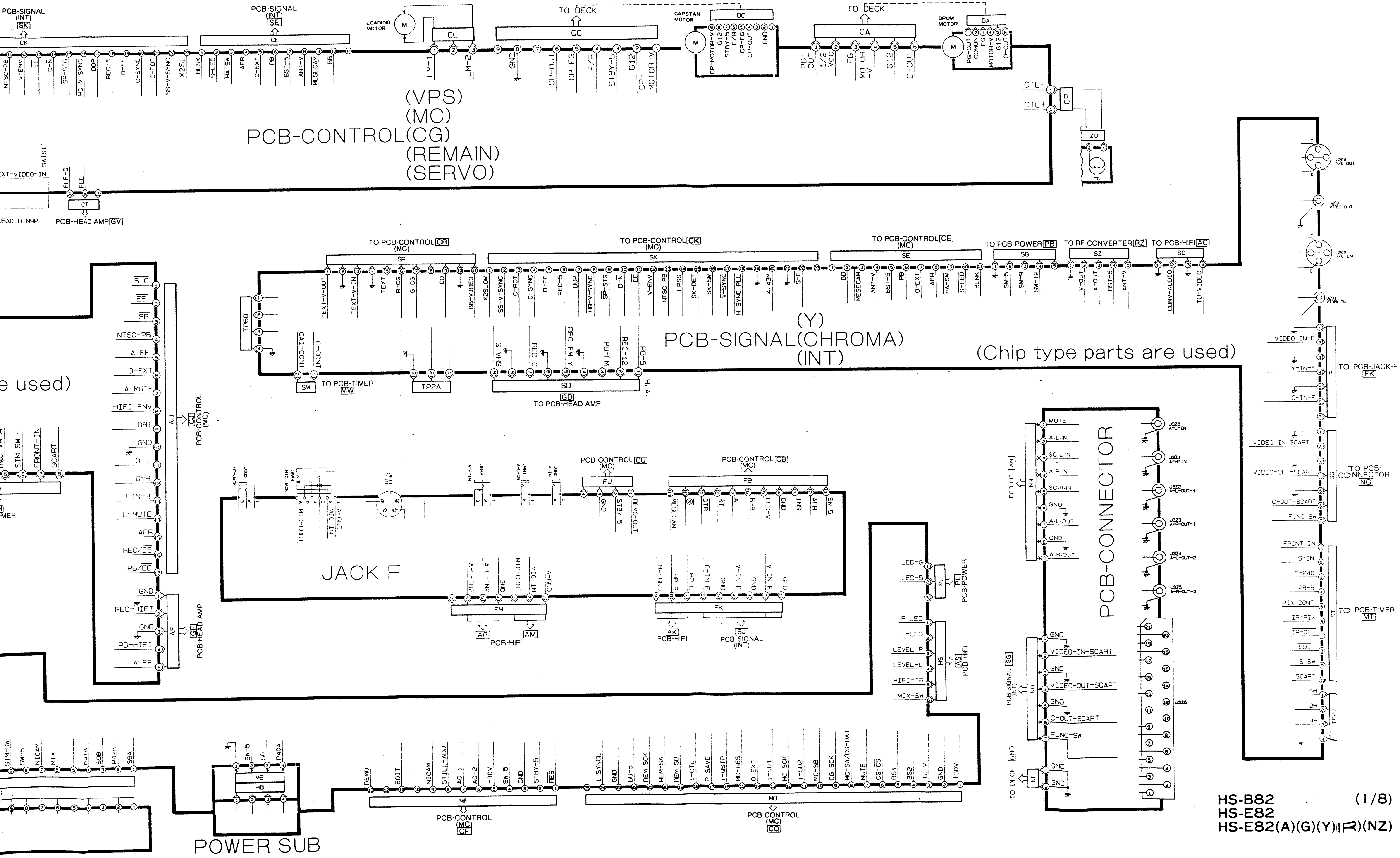
# PCB-BLOCK-DIAGRAM


PCB-SIGNAL (INT) SZ
RZ
GND V-OUT A-OUT ANT-V BST-5
IN OUT
RF CONVERTER
TU101
IF BM AFC BL AGC BH BT BU
IP101
IFIN +B AFC AGC AFT -D A-OUT1 A-OUT2 U-AGC EE V-OUT1
BH AFC-1 BL AGC BH BT BU AFC-2 A-OUT-1 A-OUT-2 EE V-OUT GND
TA
AA
PCB-HIFI (TUNER) (Chip type parts are used)
+30V O-MUTE EE+VINT BS-1 TU-V BS-2 I-SD2 I-SD1 STEREO 2CH
PCB-CONTROL (MC) CD
AD
S-C SOL MOTOR-V FL-1 R-ROT1 R-ROT2 RIS E-SENS GND FE-G FE GND STBY-5 STBY-5 NR-10.0 NR-10.0 REG-B S-SENS P0 P1 P2 P3
DM
PCB-DECK
T371 FE
Q971 2SD1273
L570
S570 MODE SW
P0 P2 P3 C P1
N.R-18.0 G12 MOTOR-V N.R-10.0 SW-5 SW-9 GND SW-12
PG
CG PCB-CONTROL (MC)
SW-5 SW-12 MOTOR-V
RR
PR
BST-5 +30V NR-45 PWV AC-2 -30V AC-1
PS
CS PCB-CONTROL (MC)
GND SW-5 SW-9 SW-12 GND SW-5 SW-12 N.R-17
PB
SB PCB-SIGNAL (INT)
AB PCB-HIFI
D970 RBV-402
D971 RBV-402
VN VP
PN
NR-10 AC10-1 AC10-2 GND NR-16.5 AC16.5-1 AC16.5-2 GND
PCB-POWER
BB G L
LED-G LED-5
PL
PCB-TIMER ML
PCB-TIMER MF
CF
REMO EDIT NICAM STILL-ADJ AC-1 AC-2 -30V SW-5 GND STBY-5 RES
PCB-TIMER MQ
CQ
SYNC GND BU-5 RMN-SCK RMN-SA RMN-SB i-CTL P-SAVE i-Q MC-RES O-EXT i-SD1 MC-SCK i-SD2 MC-SB CG-SCK MC-SA/CG-DT MUTE CG-CS BS-1 BS-2 TU-V GND +30V
PCB-JACK-F FU
CU
REMO-OUT STBY-5 GND
PCB-JACK-F FB
CB
SW-5 AFR INS GND LED-V 2CHB 2CHA ST DTR MESECAM
Z571
CH
PCB-HIFI AX
CX
TO DECK DM
CM
TO DECK
CI
GND H-SENS FE-G FE P3 P2 P1 P0 S-SENS B(REG-B) NR-10 NR-10 STBY-5 STBY-5 GND FE FE-G GND E-SENS RIS R-ROT-2 R-ROT-1 FL-SW MOTOR-V SOL S-C GND
D-FF COMP SP HASW SYNC REC-2-V REC-2-A TEXT-VIDEO-OUT GND TEXT-VIDEO-IN GND TEXT R-CG G-CG CD GND BB-VIDEO SYNC NICAM 2CHB 2CHA ST i-SD-1 i-SD-2 BS-2 TU-V BS-1 EE VINT O-MUTE +30V
CV
PCB-HEAD AMP GV
CR
PCB-SIGNAL SR (INT)
CD
PCB-HIFI AD (TUNER)
PCB-SIGNAL (Y) SD
GD
PB-5 REC-12 PB-FM GND REC-Y GND REC-C GND
PCB-HEAD AMP (Chip type parts are used)
TP-3T TP-3U GND TP-2Y TP-2X
TP2XY
PCB-CONTROL (MC) CT
FLE-G FLE
PCB-CONTROL (MC) CV
GV
D-FF COMP 2H H-A-SW REC-2-V REC-2-A
AF PCB-HIFI
GF
GND REC-HIFI GND PB-HIFI A-FF
DB
FE FE 6H-R 6H-COM 6H-L 3H-L 3H-COM 3H-R A-R A-COM A-L
6H -L 2H -R A-R FE A-L FE 2H -L 6H -R
GND GND FLE-G FLE 6H-R 6H-COM 6H-L 2H-L 2H-COM 2H-R A-R A-COM A-L
GB
TO DECK (DB)
MUTE A-L-IN-1 SC-L-IN A-R-IN-1 SC-R-IN GND A-L-OUT GND A-R-OUT
PCB-CONNECTOR NN
AN
PCB-JACK-F FM
AP
GND A-L-IN-2 A-R-IN-2
PCB-HIFI AH
MH

# DIAGRAM


PCB-TIMER MF
CF
PCB-TIMER MO
CG
PCB-JACK F FU
CU
PCB-JACK-F FB
CB
DM
REMO
EDIT
NICAM
STILL-ADJ
AC-1
AC-2
-30V
SW-5
GND
STBY-5
RES
SYNC
BU-5
RMN-SCK
RMN-SA
RMN-SB
1-CTL
P-SAVE
1-Q
MC-RES
O-EXT
1-SD1
MC-SCK
1-SD2
MC-SB
CG-SCK
MC-SA/CG-DT
MUTE
CG-CS
BS-1
BS-2
TU-V
+30V
REMO-OUT
AFR
INS
LED-V
2CHB
2CHA
ST
DTR
MESECAM
Z571
CH
PCB-HIFI AX
CX
TO DECK DM
CM
TO DECK GND
CI
EDIT
PCB-POWER PS
CS
PCB-POWER PG
CG
PCB-SIGNAL (INT) SK
CK
PCB-SIGNAL (INT) SE
CE
H-SENS
FE-G
FE
S-SENS
B(REG-B)
NR-10
STBY-5
E-SENS
RIS
R-ROT-2
R-ROT-1
FL-SW
MOTOR-V
SOL
S-C
BST-5
NR-45
PW-V
AC-2
-30V
AC-1
NR-18
G12
MOTOR-V
SW-5
SW-9
SW-12
4.43MHZ
HSYNC
V-SYNC
SK-SW
SK-DET
LPSS
NTSC-PB
V-ENV
EE
D-N
SP-SIG
HQ-V-SYNC
DOP
REC-5
D-FF
C-SYNC
C-ROT
SS-V-SYNC
X2SL
BLNK
S-LED
HA-SW
O-EXT
PB
BST-5
PCB-C
CV
PCB-HEAD AMP GV
CR
PCB-SIGNAL SR (INT)
CD
PCB-HIFI AD (TUNER)
CJ
PCB-HIFI AJ
TP4A
CT
PCB-HEAD AMP GV
J5A0 DIN9P
TEXT-VIDEO-OUT
TEXT-VIDEO-IN
COMP
SP
HASW
REC-2-V
REC-2-A
TEXT
R-CG
G-CG
CD
BB-VIDEO
NICAM
1-SD-1
1-SD-2
EE VINT
O-MUTE
PB/EE
REC/EE
L-MUTE
O-R
O-L
DRI
HIFI-ENV
A-MUTE
A-FF
CTL
SL-V-SYNC
CONT(TEXT)
4.43M-VPV
SA(SI)
FLE-G
FLE
PCB-SIGNAL (Y) SD
GD
PB-5
REC-12
PB-FM
REC-Y
REC-C
PCB-CONTROL (MC) CT
PCB-CONTROL (MC) CV
GV
2H
HA-SW
AF PCB-HIFI
GF
REC-HIFI
PB-HIFI
TP2XY
TP-3T
TP-3U
TP-2Y
TP-2X
PCB-HEAD AMP (Chip type parts are used)
DB
6H-R
6H-COM
6H-L
3H-L
3H-COM
3H-R
A-R
A-COM
A-L
2H-L
2H-R
GB
TO DECK (DB)
NN PCB-CONNECTOR
AN
A-L-IN-1
SC-L-IN
A-R-IN-1
SC-R-IN
A-L-OUT
A-R-OUT
FM PCB-JACK-F
AP
A-L-IN-2
A-R-IN-2
PCB-TIMER MS
AS
PCB-SIGNAL (INT) SC
AC
PCB-TIMER FK
AK
PCB-POWER PB
AB
R-LED
L-LED
LEVEL
HIFI-TR
MIX-SW
CONV-A
HP-L
HP-R
HP-GND
SW5
SW12
NH7
(HIFI)
PCB-HIFI (NICAM)
(DECODER)
(Chip type parts are used)
A-GND
MIC-IN
MIC CONT
A-PB
AM
PCB-JACK-F
AZ
TO DECK DZ
T370 A/C HEAD
AE
R/P
DZ
AX
PCB-CONTROL (MC) CX
REF-L
REF-R
REF-B
REC-VR-L
REC-VR-R
SIM-SW
FRONT-IN
SCART
AH
MH PCB-TIMER
AJ
CJ PCB-CONTROL (MC)
LIN-H
GF PCB HEAD AMP
TP60
PCB-HIFI AH
MH
PCB-SIGNAL (INT) ST
MT
PCB-SIGNAL (CHROMA) SW
MW
S-IN
E-240
PIX-CONT
IF-PIX
IP-OFF
C-CONT
CAI-CONT
PCB-TIMER
MC
MA
DOOR
MB
POWER SU


PCB-SIGNAL (INT) SK
PCB-SIGNAL (INT) SE
LOADING MOTOR
CL
LM-1
LM-2
TO DECK
CC
GND
CP-OUT
CP-FG
F/R
STBY-5
G12
CP-MOTOR-V
CAPSTAN MOTOR
DC
TO DECK
CA
PG-OUT
1/2 Vcc
FG
MOTOR-V
G12
D-OUT
DRUM MOTOR
DA
CTL-
CTL+
CP
ZD
CTL
PCB-CONTROL(CG)
(VPS)
(MC)
(REMAIN)
(SERVO)
EXT-VIDEO-IN
FLE-G
FLE
CT
PCB-HEAD AMP GV
TO PCB-CONTROL CR (MC)
SR
TO PCB-CONTROL CK (MC)
SK
TO PCB-CONTROL CE (MC)
SE
TO PCB-POWER PB
SB
TO RF CONVERTER RZ
SZ
TO PCB-HIFI AC
SC
TP60
PCB-SIGNAL(CHROMA)
(Y)
(INT)
(Chip type parts are used)
SW
TO PCB-TIMER MW
TP2A
SD
TO PCB-HEAD AMP GD
H.A.
J204 Y/C OUT
J203 VIDEO OUT
J202 Y/C IN
J201 VIDEO IN
VIDEO-IN-F
Y-IN-F
C-IN-F
SJ
TO PCB-JACK-F FK
VIDEO-IN-SCART
VIDEO-OUT-SCART
C-OUT-SCART
FUNC-SW
SG
TO PCB-CONNECTOR NG
FRONT-IN
S-IN
E-240
PB-5
PIX-CONT
IP-PIX
IP-OFF
EDIT
S-SW
SCART
ST
TO PCB-TIMER MT
AJ
PCB-CONTROL (MC) CJ
AF
PCB-HEAD AMP GF
JACK F
PCB-CONTROL CU (MC)
FU
PCB-CONTROL CB (MC)
FB
FM
AP
AM
PCB-HIFI
FK
AK
PCB-HIFI
SJ
PCB-SIGNAL (INT)
ML
PL
PCB-POWER
MS
AS
PCB-HIFI
PCB-CONNECTOR
PCB-HIFI AN
NN
J320 A-L-IN
J321 A-R-IN
J322 A-L-OUT-1
J323 A-R-OUT-1
J324 A-L-OUT-2
J325 A-R-OUT-2
J326
PCB SIGNAL (INT) SG
NG
TO DECK GN
NL
POWER SUB
MB
HB
MF
PCB-CONTROL (MC) CF
MQ
PCB-CONTROL (MC) CQ

**HS-B82** (1/8)
**HS-E82**
**HS-E82(A)(G)(Y)(R)(NZ)**

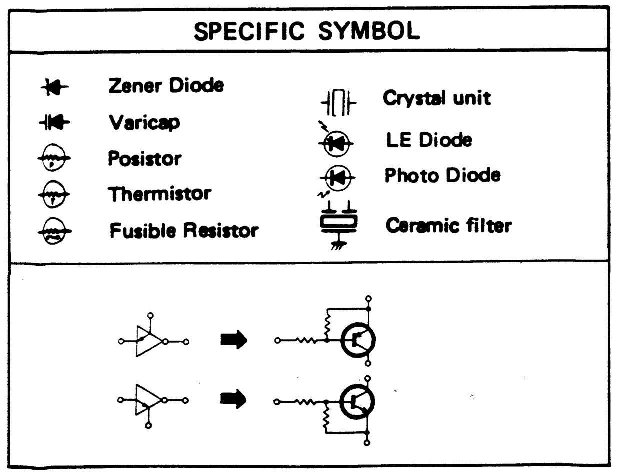
# SCHEMATIC DIAGRAM

**NOTE 1:**

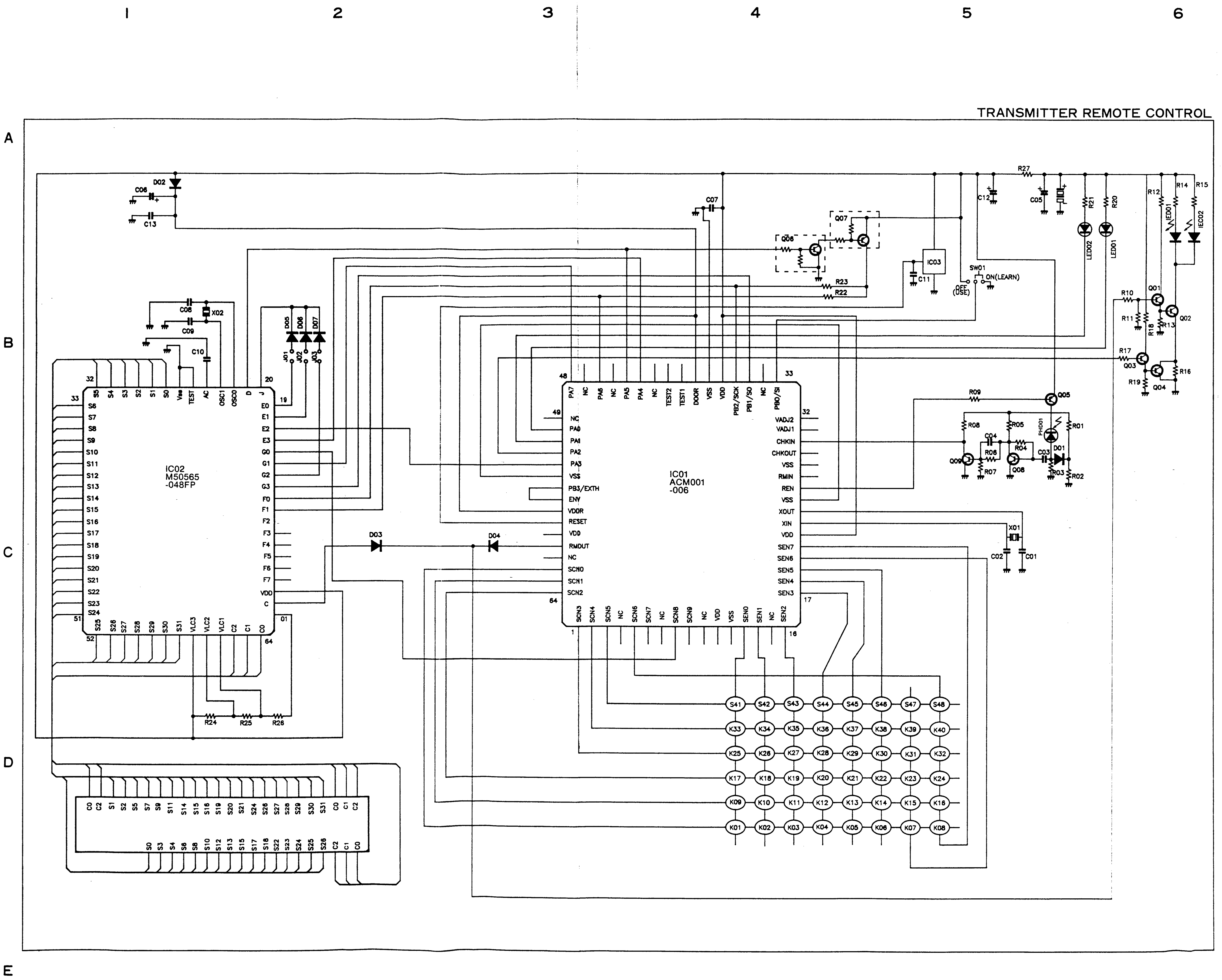
1. DC voltages were measured from points indicated to the circuit ground with a digital voltmeter.
2. The voltages parenthesised are on SP recording mode.
   While those without parenthesised on SP play back mode.

**NOTE 2:**

1. The unit of resistance "ohm" entirely omitted.
   Accordingly, K = 1000 ohms
   M = 1000K ohms.
2. The wattage of resistor, not specifically designated, is 1/4 watt except CHIP resistors.
3. Resistors, not specifically designated, are carbon resistors except CHIP resistors.
4. The marks of resistors are as follows.
   CE : Cemented resistor
   MB : Metal oxide film resistor (type B)
   Ⓢ : Fixed composition resistors
   Ⓦ : Wire wound resistor
   Ⓜ : Metal film resistor
5. The tolerance of resistor value, not specifically designated, is: ±5%, K = ±10% M = ±20%
6. The unit of capacitance, not specifically designated, is:
   a) µF , for numbers less than 1
   b) PF, for numbers more than 1
7. Capacitors, not specifically designated are Ceramic capacitors except electrolytic capacitors.
8. The marks of capacitors are as follows:
   ALM : Aluminus electrolytic capacitor
   MF : Polyester capacitor
   PP : Polypropylene film capacitor
   TAN : Tantalum capacitor
   SC : Semiconductor Ceramic Capacitors
   TF : Twin film capacitor
   NP : Non polarized electrolytic capacitor
   ⏚ : Electrolytic capacitor
9. The DC working voltage of capacitor, not specifically designated is: 50V
10. The tolerance of capacitor value, not specifically designated is: ±10%
    and J = ±5% K = ±10% M = ±20% $P = {}^{+100\%}_{-\ \ 0\%}$
    C = ±0.25PF D = ±0.5PF F = ±1PF $Z = {}^{+80\%}_{-20\%}$ N=±30%
11. Ceramic capacitors with the marks RH, UJ, SL, etc. are temperature compensating types.


SPECIFIC SYMBOL
Zener Diode
Varicap
Posistor
Thermistor
Fusible Resistor
Crystal unit
LE Diode
Photo Diode
Ceramic filter

This is a basic schematic diagram. Some sets may be subject to modification according to engineering improvement.

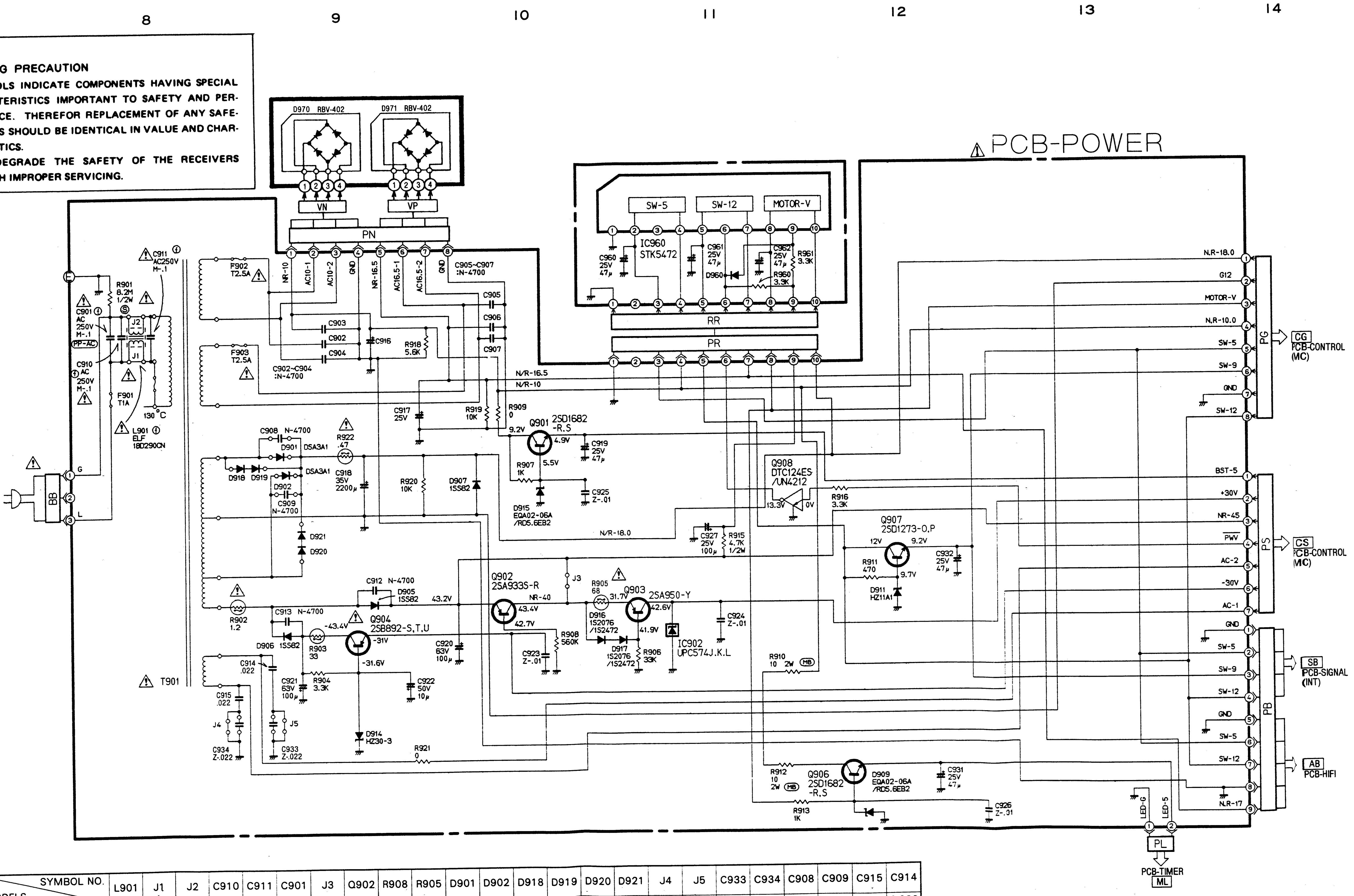

1
2
3
4
5
6
A
B
C
D
E
TRANSMITTER REMOTE CONTROL
IC02
M50565
-048FP
IC01
ACM001
-006
IC03
X01
X02
D01
D02
D03
D04
D05
D06
D07
Q01
Q02
Q03
Q04
Q05
Q06
Q07
Q08
Q09
LED01
LED02
PHD01
SW01
ON(LEARN)
OFF
(USE)
R24
R25
R26
R27
C01
C02
C07
C08
C09
C10
C11
C12
C13
S41
S42
S43
S44
S45
S46
S47
S48
K33
K34
K35
K36
K37
K38
K39
K40
K25
K26
K27
K28
K29
K30
K31
K32
K17
K18
K19
K20
K21
K22
K23
K24
K09
K10
K11
K12
K13
K14
K15
K16
K01
K02
K03
K04
K05
K06
K07
K08

⚠

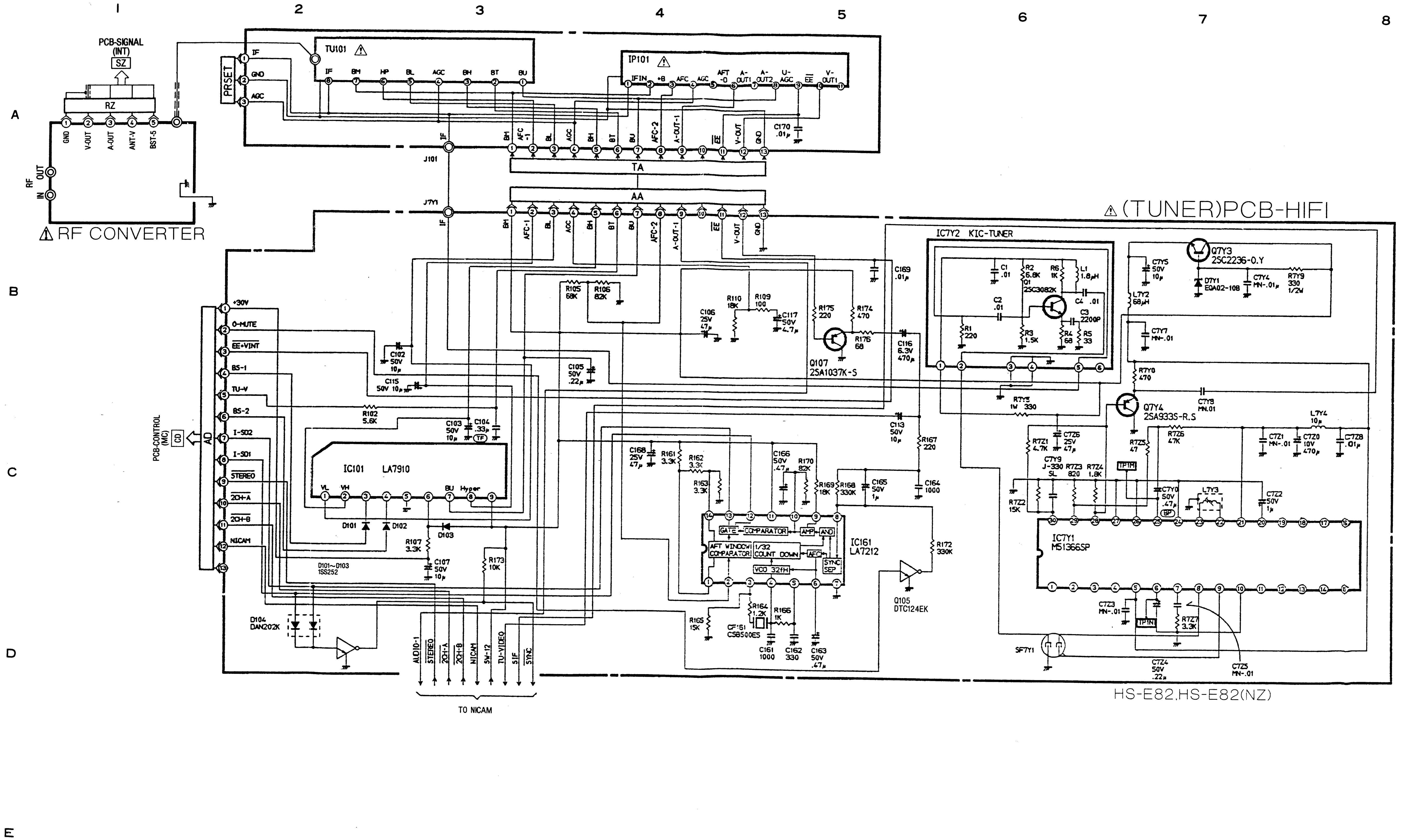
**SERVICING PRECAUTION**

SYMBOLS INDICATE COMPONENTS HAVING SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY AND PERFORMANCE. THEREFOR REPLACEMENT OF ANY SAFETY PARTS SHOULD BE IDENTICAL IN VALUE AND CHARACTERISTICS.

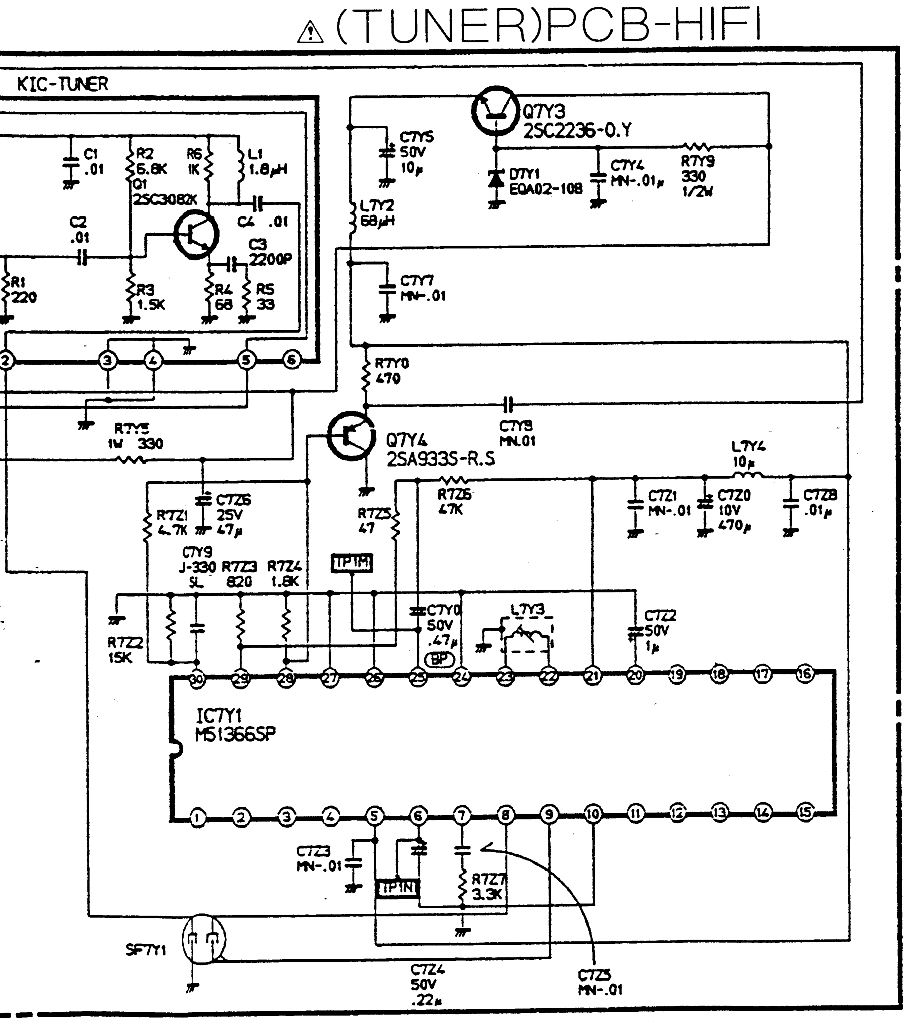
DON'T DEGRADE THE SAFETY OF THE RECEIVERS THROUGH IMPROPER SERVICING.


7
8
9
10
11
12
13
14
⚠ PCB-POWER
D970 RBV-402
D971 RBV-402
VN
VP
PN
NR-10
AC10-1
AC10-2
GND
NR-16.5
AC16.5-1
AC16.5-2
GND
C905~C907 :N-4700
F902 T2.5A
F903 T2.5A
F901 T1A
C911 AC250V M-.1
R901 8.2M 1/2W
C901 AC 250V M-.1 (PP-AC)
C910 AC 250V M-.1
J1
J2
130°C
L901 ELF 18D290CN
T901
BB
G
L
C903
C902
C904
C916
R918 5.6K
C902~C904 :N-4700
C905
C906
C907
N/R-16.5
N/R-10
C917 25V
R919 10K
R909 0
Q901 2SD1682 -R.S
9.2V
4.9V
5.5V
C919 25V 47μ
R907 1K
C925 Z-.01
D915 EQA02-06A /RD5.6EB2
C908 N-4700
D901 DSA3A1
R922 .47
D918
D919
D902
DSA3A1
C909 N-4700
C918 35V 2200μ
R920 10K
D907 1SS82
D921
D920
N/R-18.0
C912 N-4700
D905 1SS82
43.2V
R902 1.2
C913 N-4700
D906 1SS82
R903 33
Q904 2SB892-S,T,U
-43.4V
-31V
-31.6V
R904 3.3K
C921 63V 100μ
C922 50V 10μ
D914 HZ30-3
R921 0
C914 .022
C915 .022
J4
J5
C934 Z-.022
C933 Z-.022
C920 63V 100μ
Q902 2SA933S-R
NR-40
43.4V
42.7V
R908 560K
C923 Z-.01
J3
R905 68
31.7V
Q903 2SA950-Y
42.6V
41.9V
D916 1S2076 /1S2472
D917 1S2076 /1S2472
R906 33K
IC902 UPC574J.K.L
C924 Z-.01
SW-5
SW-12
MOTOR-V
IC960 STK5472
C960 25V 47μ
C961 25V 47μ
C962 25V 47μ
R961 3.3K
D960
R960 3.3K
RR
PR
Q908 DTC124ES /UN4212
13.3V
0V
R916 3.3K
C927 25V 100μ
R915 4.7K 1/2W
Q907 2SD1273-O,P
12V
9.2V
9.7V
R911 470
C932 25V 47μ
D911 HZ11A1
R910 10 2W (MB)
R912 10 2W (MB)
Q906 2SD1682 -R.S
D909 EQA02-06A /RD5.6EB2
C931 25V 47μ
R913 1K
C926 Z-.01
N.R-18.0
G12
MOTOR-V
N.R-10.0
SW-5
SW-9
GND
SW-12
PG
CG PCB-CONTROL (MC)
BST-5
+30V
NR-45
PWV
AC-2
-30V
AC-1
PS
CS PCB-CONTROL (MC)
GND
SW-5
SW-9
SW-12
GND
SW-5
SW-12
N.R-17
PB
SB PCB-SIGNAL (INT)
AB PCB-HIFI
LED-G
LED-5
PL
PCB-TIMER ML

| SYMBOL NO.<br>MODELS | L901 | J1 | J2 | C910 | C911 | C901 | J3 | Q902 | R908 | R905 | D901 | D902 | D918 | D919 | D920 | D921 | J4 | J5 | C933 | C934 | C908 | C909 | C915 | C914 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HS-B82,E82(IR) | × | ○ | ○ | × | × | × | × | ○ | ○ | 68 | × | × | ○ | ○ | ○ | ○ | × | × | ○ | ○ | × | × | 0.022 | 0.022 |
| HS-E82,E82(A)(Y)(NZ) | × | ○ | ○ | × | × | × | ○ | × | × | 68 | × | × | ○ | ○ | ○ | ○ | ○ | ○ | × | × | × | × | 0.01 | 0.01 |
| HS-E82(G) | ○ | × | × | ○ | ○ | × | ○ | × | × | 68 | × | × | ○ | ○ | ○ | ○ | ○ | ○ | × | × | × | × | 0.01 | 0.01 |

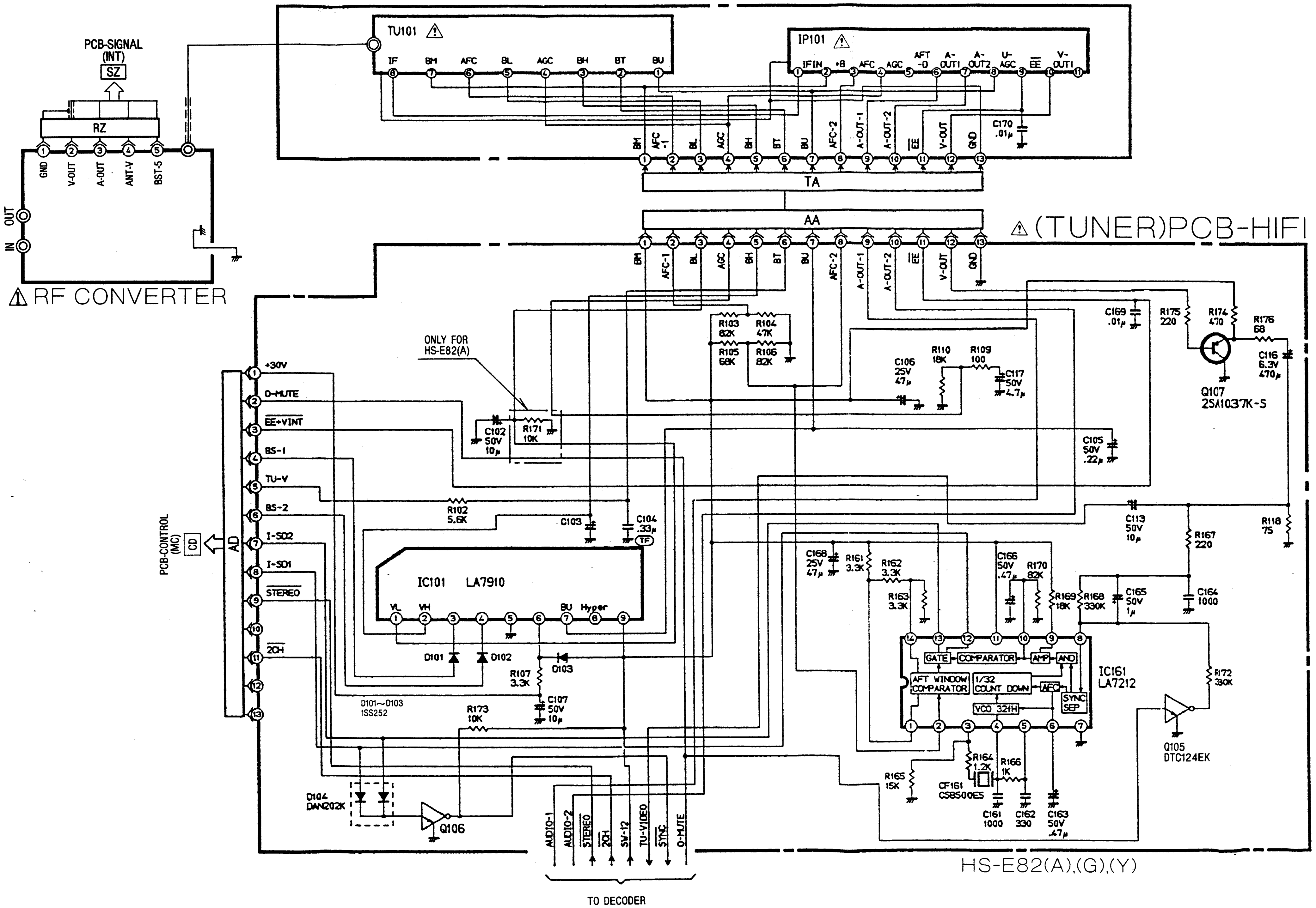

1
2
3
4
5
6
7
8
A
B
C
D
E
PCB-SIGNAL (INT)
SZ
RZ
GND
V-OUT
A-OUT
ANT-V
BST-5
RF
OUT
IN
⚠RF CONVERTER
PRSET
IF
GND
AGC
TU101 ⚠
IF BM HP BL AGC BH BT BU
IP101 ⚠
IFIN +B AFC AGC AFT-0 A-OUT1 A-OUT2 U-AGC EE V-OUT1
C170 .01μ
J101
TA
AA
J7Y1
BH AFC-1 BL AGC BH BT BU AFC-2 A-OUT-1 EE V-OUT GND
⚠(TUNER)PCB-HIFI
PCB-CONTROL (MC)
CD
AD
+30V
O-MUTE
EE+VINT
BS-1
TU-V
BS-2
I-SO2
I-SO1
STEREO
2CH-A
2CH-B
NICAM
R105 68K
R106 82K
C102 50V 10μ
C115 50V 10μ
C105 50V .22μ
R102 5.6K
C103 50V 10μ
C104 .33μ
TF
IC101 LA7910
VL VH BU Hyper
D101
D102
D103
R107 3.3K
C107 50V 10μ
R173 10K
D101~D103 1SS252
D104 DAN202K
AUDIO-1
STEREO
2CH-A
2CH-B
NICAM
5V-12
TU-VIDEO
SIF
SYNC
TO NICAM
R110 18K
R109 100
C106 25V 47μ
C117 50V 4.7μ
R175 220
R174 470
R176 68
Q107 2SA1037K-S
C169 .01μ
C116 6.3V 470μ
C113 50V 10μ
R167 220
C164 1000
C168 25V 47μ
R161 3.3K
R162 3.3K
R163 3.3K
C166 50V .47μ
R170 82K
R169 18K
R168 330K
C165 50V 1μ
IC161 LA7212
GATE COMPARATOR
AMP AND
AFT WINDOW COMPARATOR
1/32 COUNT DOWN
AFC
SYNC SEP
VCO 32fH
R165 15K
R164 1.2K
R166 1K
CF161 CSB500ES
C161 1000
C162 330
C163 50V .47μ
R172 330K
Q105 DTC124EK
IC7Y2 KIC-TUNER
C1 .01
R2 6.8K
R6 1K
L1 1.8μH
Q1 2SC3082K
C2 .01
C4 .01
C3 2200P
R1 220
R3 1.5K
R4 68
R5 33
Q7Y3 2SC2236-O.Y
C7Y5 50V 10μ
D7Y1 EQA02-10B
C7Y4 MN-.01μ
R7Y9 330 1/2W
L7Y2 68μH
C7Y7 MN-.01
R7Y0 470
R7Y5 1W 330
C7Y8 MN.01
Q7Y4 2SA933S-R.S
L7Y4 10μ
R7Z1 4.7K
C7Z6 25V 47μ
R7Z5 47
R7Z6 47K
C7Z1 MN-.01
C7Z0 10V 470μ
C7Z8 .01μ
C7Y9 J-330 SL
R7Z3 820
R7Z4 1.8K
TP1M
R7Z2 15K
C7Y0 50V .47μ
BP
L7Y3
C7Z2 50V 1μ
IC7Y1 M51366SP
C7Z3 MN-.01
TP1N
R7Z7 3.3K
SF7Y1
C7Z4 50V .22μ
C7Z5 MN-.01
HS-E82.HS-E82(NZ)

6 7 8 9 10 11 12 13



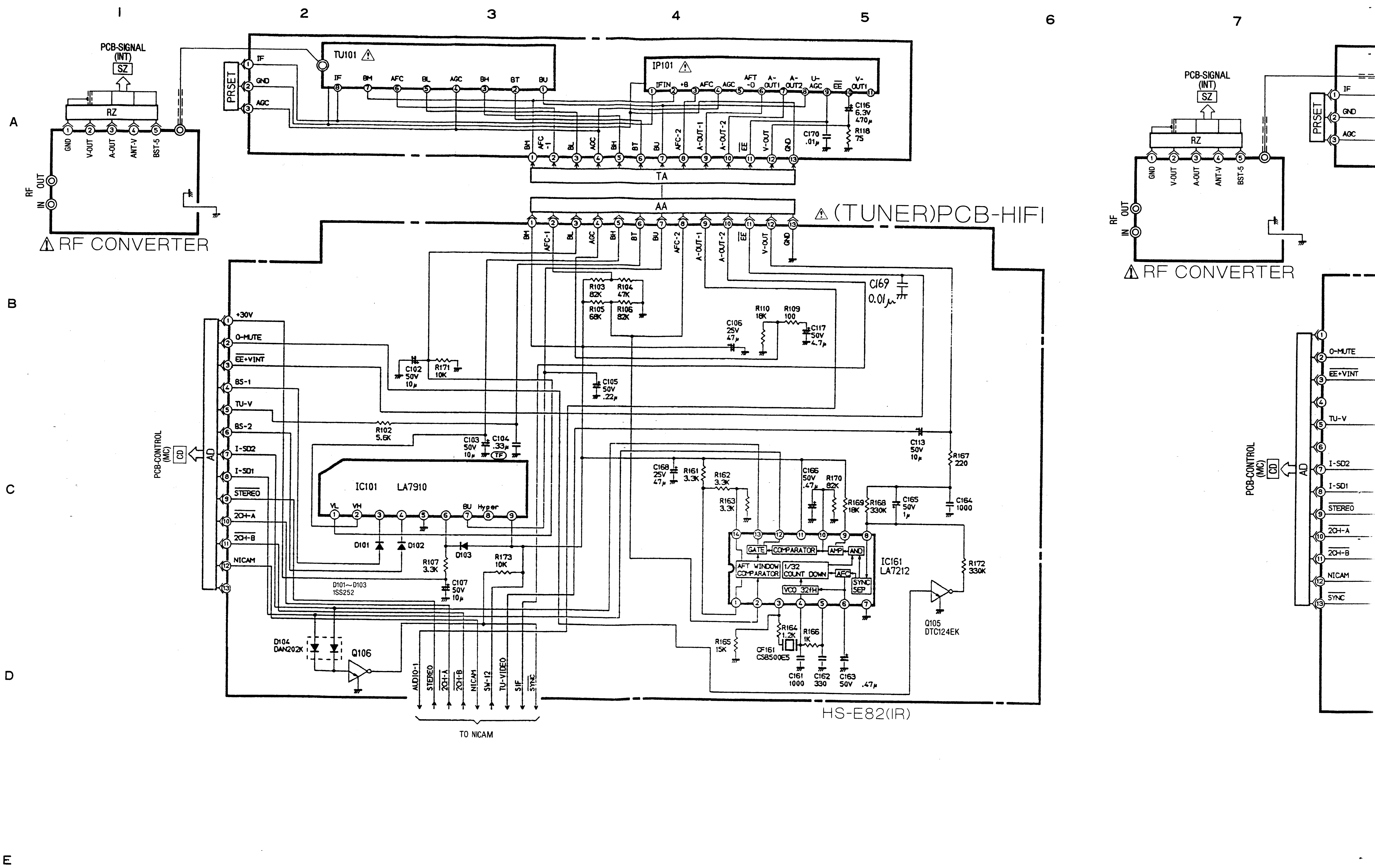
⚠(TUNER)PCB-HIFI
KIC-TUNER
C1 .01
R2 6.8K
R6 1K
L1 1.8μH
Q1 2SC3082K
C2 .01
C4 .01
C3 2200P
R1 220
R3 1.5K
R4 68
R5 33
Q7Y3 2SC2236-O.Y
C7Y5 50V 10μ
D7Y1 EQA02-10B
C7Y4 MN-.01μ
R7Y9 330 1/2W
L7Y2 68μH
C7Y7 MN-.01
R7Y0 470
R7Y5 1W 330
Q7Y4 2SA933S-R.S
C7Y8 MN.01
L7Y4 10μ
R7Z1 4.7K
C7Z6 25V 47μ
R7Z5 47
R7Z6 47K
C7Z1 MN-.01
C7Z0 10V 470μ
C7Z8 .01μ
C7Y9 J-330 SL
R7Z3 820
R7Z4 1.8K
TP1H
C7Y0 50V .47μ
BP
L7Y3
C7Z2 50V 1μ
R7Z2 15K
IC7Y1 M51366SP
C7Z3 MN-.01
TP1N
R7Z7 3.3K
SF7Y1
C7Z4 50V .22μ
C7Z5 MN-.01

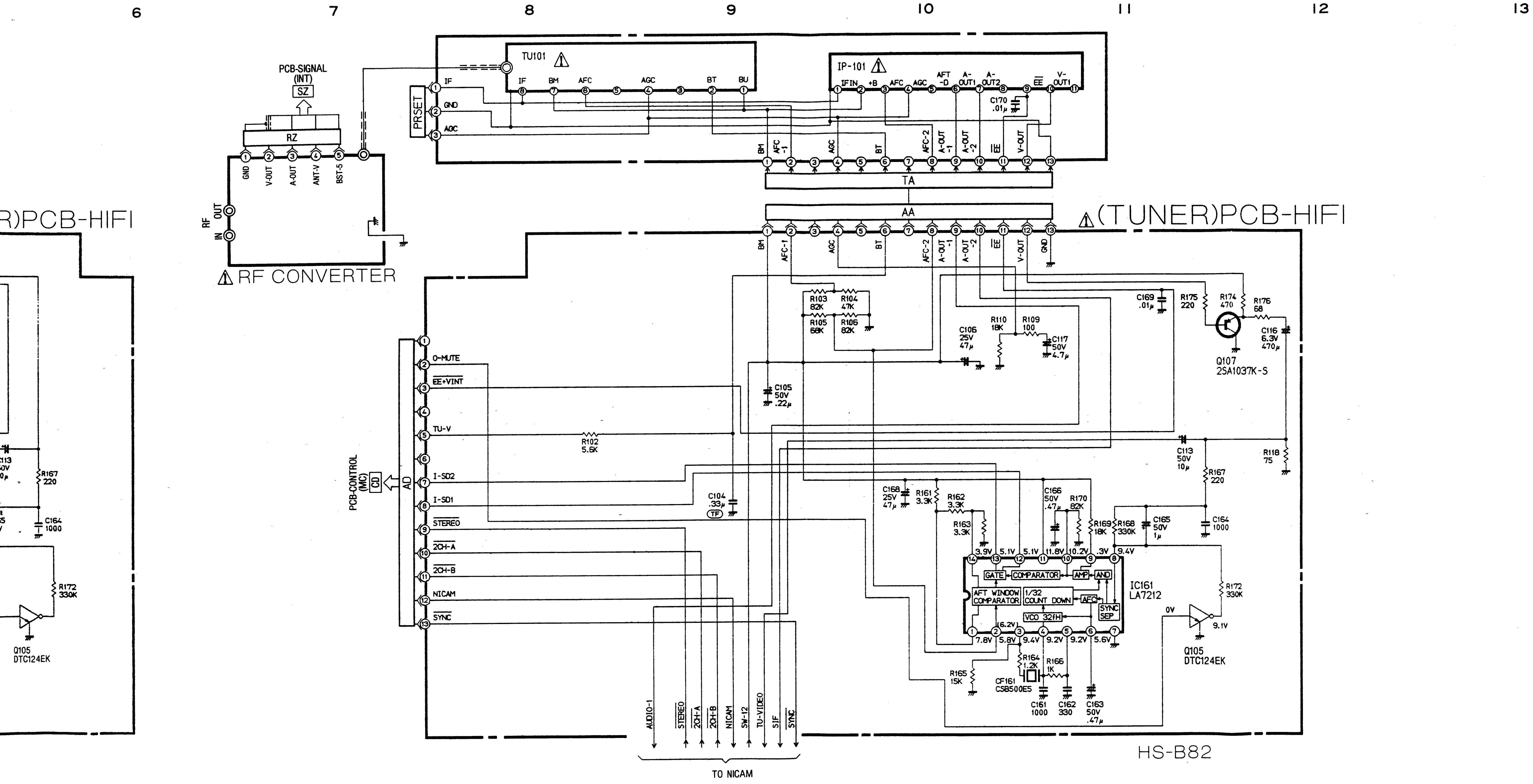
HS-E82,HS-E82(NZ)



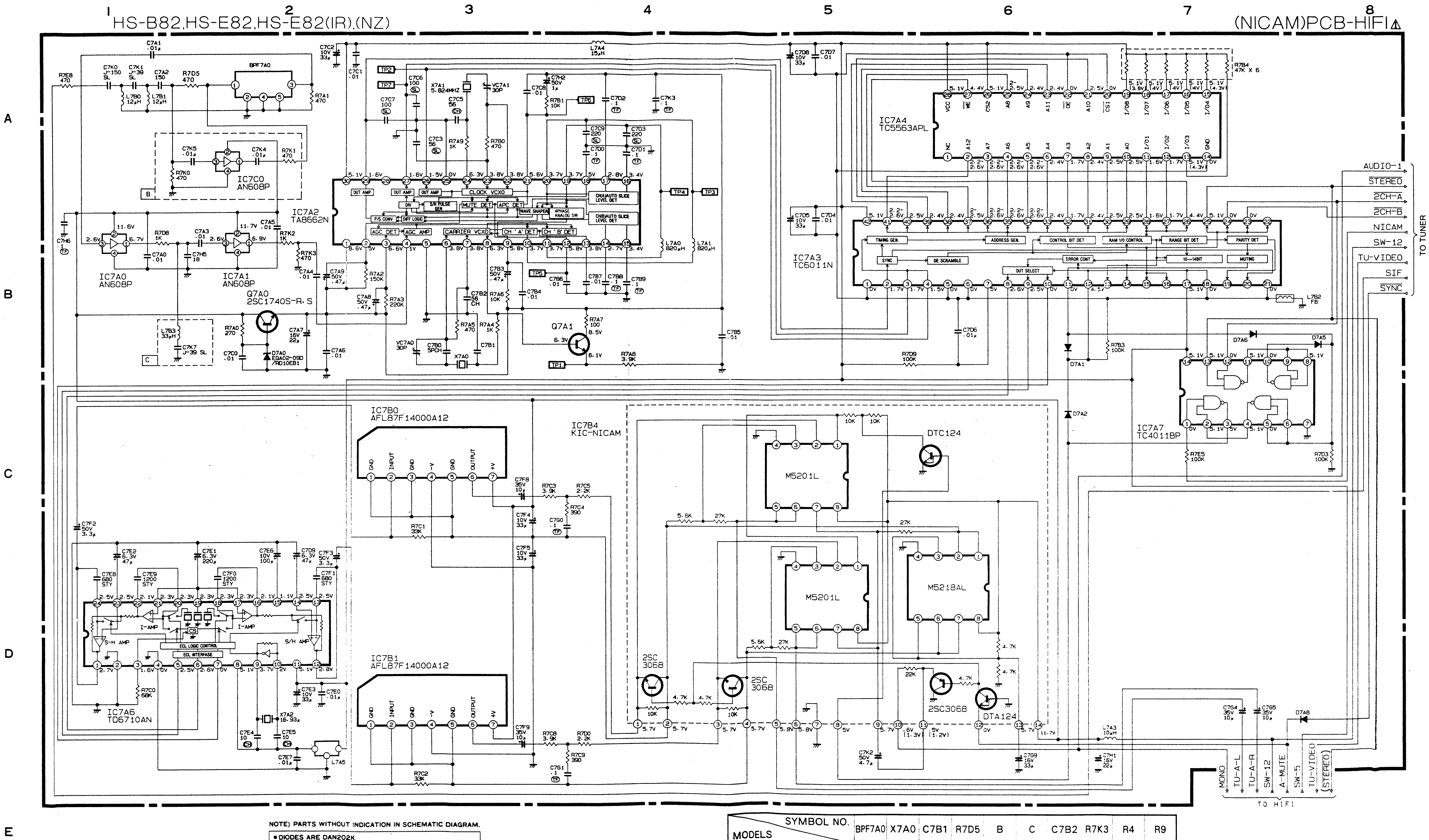
PCB-SIGNAL (INT)
SZ
RZ
GND
V-OUT
A-OUT
ANT-V
BST-5
OUT
IN
⚠RF CONVERTER
TU101 ⚠
IF BM AFC BL AGC BH BT BU
IP101 ⚠
IFIN +B AFC AGC AFT-O A-OUT1 A-OUT2 U-AGC EE V-OUT1
BM AFC-1 BL AGC BH BT BU AFC-2 A-OUT-1 A-OUT-2 EE V-OUT GND
C170 .01μ
TA
AA
⚠(TUNER)PCB-HIFI
+30V
O-MUTE
EE+VINT
BS-1
TU-V
BS-2
I-SO2
I-SO1
STEREO
2CH
PCB-CONTROL (MC)
CD
AD
ONLY FOR HS-E82(A)
C102 50V 10μ
R171 10K
R103 82K
R104 47K
R105 68K
R106 82K
C106 25V 47μ
R110 18K
R109 100
C117 50V 4.7μ
C169 .01μ
R175 220
R174 470
R176 68
C116 6.3V 470μ
Q107 2SA1037K-S
C105 50V .22μ
R102 5.6K
C103
C104 .33μ
TF
IC101 LA7910
VL VH BU Hyper
D101 D102 D103
R107 3.3K
C107 50V 10μ
D101~D103 1SS252
R173 10K
D104 DAN202K
Q106
C113 50V 10μ
R167 220
R118 75
C168 25V 47μ
R161 3.3K
R162 3.3K
R163 3.3K
C166 50V .47μ
R170 82K
R169 18K
R168 330K
C165 50V 1μ
C164 1000
GATE COMPARATOR AMP AND
AFT WINDOW COMPARATOR
1/32 COUNT DOWN
AFC
SYNC SEP
VCO 32fH
IC151 LA7212
R172 330K
Q105 DTC124EK
R165 15K
R164 1.2K
R166 1K
CF161 CSB500E5
C161 1000
C162 330
C163 50V .47μ
AUDIO-1 AUDIO-2 STEREO 2CH SV-12 TU-VIDEO SYNC O-MUTE
TO DECODER

HS-E82(A),(G),(Y)


1
2
3
4
5
6
7
A
B
C
D
E
PCB-SIGNAL (INT)
SZ
RZ
GND
V-OUT
A-OUT
ANT-V
BST-5
RF
OUT
IN
⚠ RF CONVERTER
PRSET
IF
GND
AGC
TU101 ⚠
IF
BM
AFC
BL
AGC
BH
BT
BU
IP101 ⚠
IFIN
+B
AFC
AGC
AFT -O
A-OUT1
A-OUT2
U-AGC
EE
V-OUT1
C116 6.3V 470µ
R118 75
C170 .01µ
BM
AFC -1
BL
AGC
BH
BT
BU
AFC-2
A-OUT-1
A-OUT-2
EE
V-OUT
GND
TA
AA
⚠ (TUNER)PCB-HIFI
C169 0.01µ
R103 82K
R104 47K
R105 68K
R106 82K
R110 18K
R109 100
C106 25V 47µ
C117 50V 4.7µ
+30V
O-MUTE
EE+VINT
BS-1
TU-V
BS-2
I-SD2
I-SD1
STEREO
2CH-A
2CH-B
NICAM
PCB-CONTROL (MC)
CD
AD
C102 50V 10µ
R171 10K
C105 50V .22µ
R102 5.6K
C103 50V 10µ
C104 .33µ
TF
C113 50V 10µ
R167 220
IC101 LA7910
VL
VH
BU
Hyper
D101
D102
D103
R173 10K
R107 3.3K
C107 50V 10µ
D101~D103 1SS252
D104 DAN202K
Q106
C168 25V 47µ
R161 3.3K
R162 3.3K
R163 3.3K
C166 50V .47µ
R170 82K
R169 18K
R168 330K
C165 50V 1µ
C164 1000
GATE
COMPARATOR
AMP
AND
AFT WINDOW COMPARATOR
1/32 COUNT DOWN
AFC
SYNC SEP
VCO 32fH
IC161 LA7212
R172 330K
Q105 DTC124EK
R165 15K
R164 1.2K
R166 1K
CF161 CSB500E5
C161 1000
C162 330
C163 50V .47µ
AUDIO-1
STEREO
2CH-A
2CH-B
NICAM
SW-12
TU-VIDEO
SIF
SYNC
TO NICAM
HS-E82(IR)
PCB-SIGNAL (INT)
SZ
RZ
GND
V-OUT
A-OUT
ANT-V
BST-5
RF
OUT
IN
⚠ RF CONVERTER
PRSET
IF
GND
AGC
PCB-CONTROL (MC)
CD
AD
O-MUTE
EE+VINT
TU-V
I-SD2
I-SD1
STEREO
2CH-A
2CH-B
NICAM
SYNC


6
7
8
9
10
11
12
13
PCB-SIGNAL
(INT)
SZ
RZ
GND
V-OUT
A-OUT
ANT-V
BST-5
RF
OUT
IN
RF CONVERTER
PRSET
IF
GND
AGC
TU101
IF
BM
AFC
AGC
BT
BU
IP-101
IF IN
+B
AFC
AGC
AFT -D
A-OUT1
A-OUT2
EE
V-OUT1
C170
.01μ
BM
AFC -1
AGC
BT
AFC-2
A-OUT -1
A-OUT -2
EE
V-OUT
TA
AA
(TUNER)PCB-HIFI
)PCB-HIFI
BM
AFC-1
AGC
BT
AFC-2
A-OUT -1
A-OUT -2
EE
V-OUT
GND
R103
82K
R104
47K
R105
68K
R106
82K
R110
18K
R109
100
C106
25V
47μ
C117
50V
4.7μ
C169
.01μ
R175
220
R174
470
R176
68
C116
6.3V
470μ
Q107
2SA1037K-S
C105
50V
.22μ
PCB-CONTROL
(MC)
CD
AD
O-MUTE
EE+VINT
TU-V
I-SD2
I-SD1
STEREO
2CH-A
2CH-B
NICAM
SYNC
R102
5.6K
C104
.33μ
TF
C113
50V
10μ
R118
75
R167
220
C164
1000
C168
25V
47μ
R161
3.3K
R162
3.3K
R163
3.3K
C166
50V
.47μ
R170
82K
R169
18K
R168
330K
C165
50V
1μ
3.9V
5.1V
5.1V
11.8V
10.2V
.3V
9.4V
GATE
COMPARATOR
AMP
AND
AFT WINDOW COMPARATOR
1/32 COUNT DOWN
AFC
SYNC SEP
VCO 32fH
IC161
LA7212
6.2V
7.8V
5.8V
9.4V
9.2V
9.2V
5.6V
R164
1.2K
R165
15K
R166
1K
CF161
CSB500E5
C161
1000
C162
330
C163
50V
.47μ
R172
330K
0V
9.1V
Q105
DTC124EK
AUDIO-1
STEREO
2CH-A
2CH-B
NICAM
SW-12
TU-VIDEO
SIF
SYNC
TO NICAM
HS-B82
C113
50V
10μ
R167
220
C164
1000
R172
330K
Q105
DTC124EK

HS-B82,HS-E82,HS-E82(IR),(NZ) (NICAM)PCB-HIFI⚠


1
2
3
4
5
6
7
8
A
B
C
D
E
BPF7A0
IC7C0
AN608P
IC7A0
AN608P
IC7A1
AN608P
Q7A0
2SC1740S-R, S
D7A0
EQA02-09D
/RD10EB1
IC7A2
TA8662N
OUT AMP
CLOCK VCXO
MUTE DET
APC DET
AGC DET
AGC AMP
CARRIER VCXO
CH 'A' DET
CH 'B' DET
P/S CONV
DIFF LOGIC
WAVE SHAPER
CHA/AUTO SLICE LEVEL DET
CHB/AUTO SLICE LEVEL DET
X7A1
5.824MHZ
X7A0
Q7A1
TP1
TP2
TP3
TP4
TP5
TP6
TP7
IC7A4
TC5563APL
R7B4
47K X 6
IC7A3
TC6011N
TIMING GEN.
ADDRESS GEN.
CONTROL BIT DET
RAM I/O CONTROL
RANGE BIT DET
PARITY DET
SYNC
DE SCRAMBLE
ERROR CONT
10→14BIT
MUTING
OUT SELECT
IC7A7
TC4011BP
D7A1
D7A2
D7A5
D7A6
D7A8
AUDIO-1
STEREO
2CH-A
2CH-B
NICAM
SW-12
TU-VIDEO
SIF
SYNC
TO TUNER
IC7B0
AFL87F14000A12
IC7B1
AFL87F14000A12
IC7B4
KIC-NICAM
M5201L
M5201L
M5218AL
DTC124
2SC3068
2SC3068
2SC3068
DTA124
IC7A6
TD6710AN
I-AMP
S-H AMP
S/H AMP
ECL LOGIC CONTROL
ECL INTERFASE
X7A2
16.93
L7A5
B
C
MONO
TU-A-L
TU-A-R
SW-12
A-MUTE
SW-5
TU-VIDEO
(STEREO)
TO HIFI

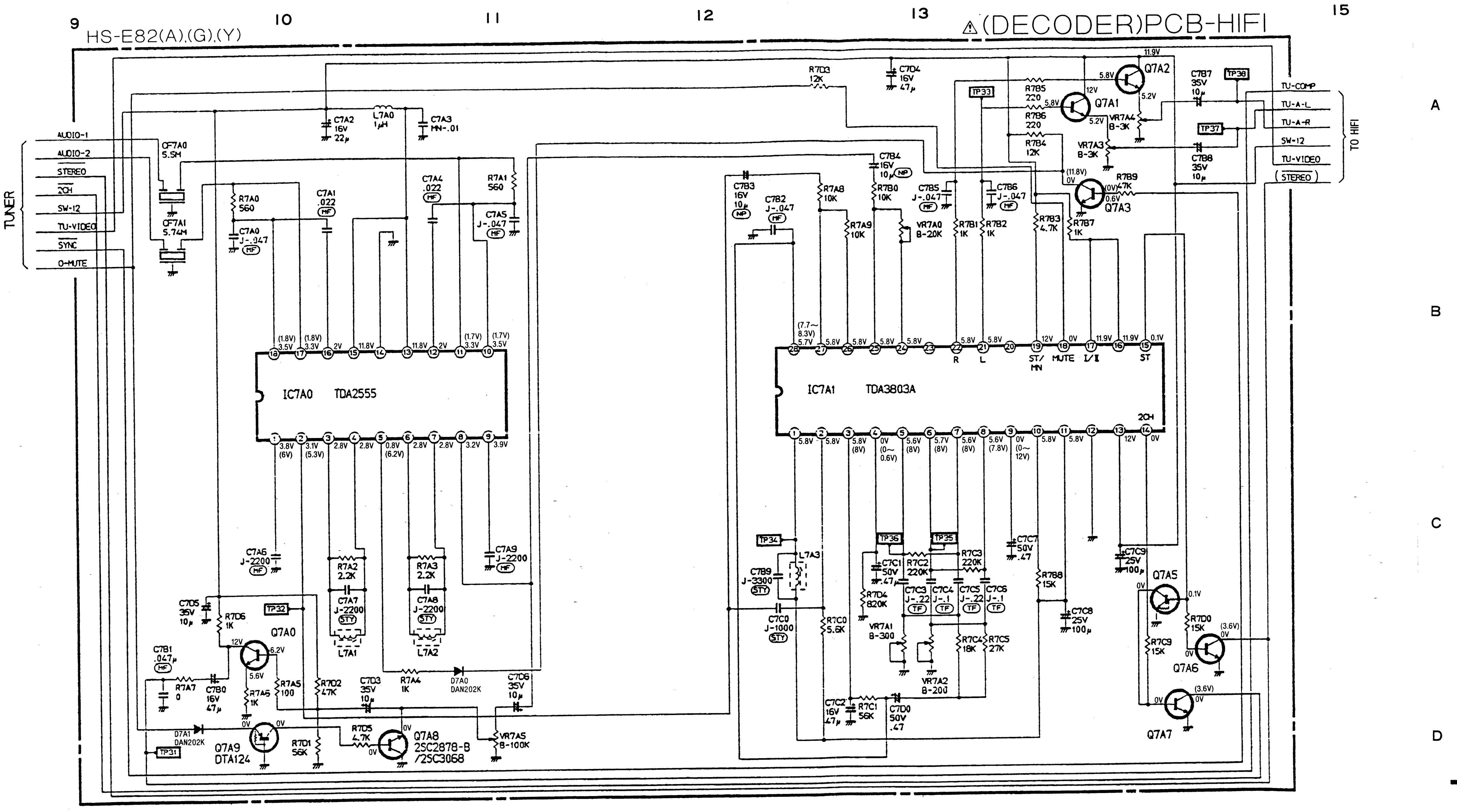
NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

● DIODES ARE DAN202K

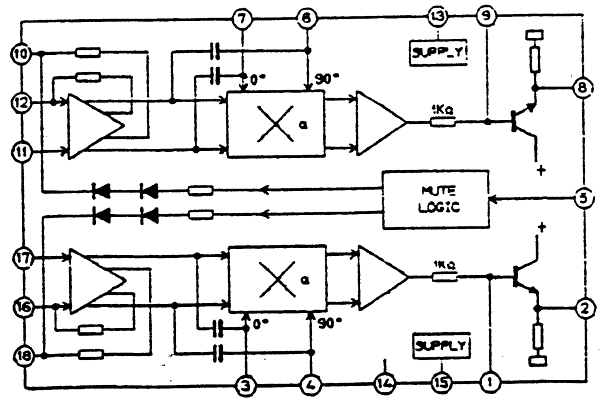
| SYMBOL NO. / MODELS | BPF7A0 | X7A0 | C7B1 | R7D5 | B | C | C7B2 | R7K3 | R4 | R9 |
|---|---|---|---|---|---|---|---|---|---|---|
| HS-E82(NZ) | 2080 | 5.85MHz | 18CH | ○ | × | × | 56CH | 680 | 3.9K | 3.9K |
| HS-E82 | 2080 | 5.85MHz | 18CH | ○ | × | × | 56CH | 680 | 5.6K | 5.6K |
| HS-B82,HS-E82(IR) | 2110 | 6.552MHz | 47CH | × | ○ | ○ | 56SL | 180 | 5.6K | 5.6K |

HS-E82(A),(G),(Y)

## ⚠(DECODER)PCB-HIFI

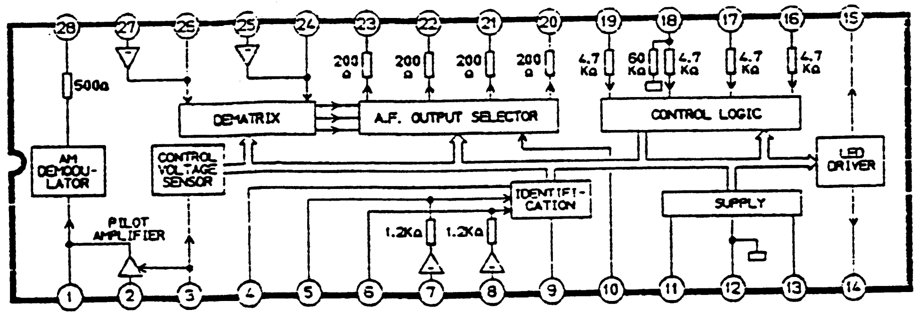


9
10
11
12
13
15
I
A
B
C
D
TUNER
AUDIO-1
AUDIO-2
STEREO
2CH
SW-12
TU-VIDEO
SYNC
O-MUTE
CF7A0 5.5M
CF7A1 5.74M
R7A0 560
C7A0 J-.047 (MF)
C7A1 .022 (MF)
C7A2 16V 22μ
L7A0 1μH
C7A3 MN-.01
C7A4 .022 (MF)
R7A1 560
C7A5 J-.047 (MF)
IC7A0 TDA2555
C7A6 J-2200 (MF)
R7A2 2.2K
C7A7 J-2200 (STY)
L7A1
R7A3 2.2K
C7A8 J-2200 (STY)
L7A2
C7A9 J-2200 (MF)
C7D5 35V 10μ
R7D6 1K
TP32
Q7A0
C7B1 .047μ (MF)
R7A7 0
C7B0 16V 47μ
R7A5 1K
R7A5 100
R7D2 47K
C7D3 35V 10μ
R7A4 1K
D7A0 DAN202K
C7D6 35V 10μ
VR7A5 B-100K
D7A1 DAN202K
TP31
Q7A9 DTA124
R7D1 56K
R7D5 4.7K
Q7A8 2SC2878-B /2SC3068
R7D3 12K
C7D4 16V 47μ
C7B3 16V 10μ (NP)
C7B2 J-.047 (MF)
R7A8 10K
C7B4 16V 10μ (NP)
R7B0 10K
R7A9 10K
VR7A0 B-20K
C7B5 J-.047 (MF)
R7B1 1K
C7B6 J-.047 (MF)
R7B2 1K
TP33
R7B5 220
R7B6 220
R7B4 12K
R7B3 4.7K
R7B7 1K
Q7A1
Q7A2
VR7A4 B-3K
VR7A3 B-3K
Q7A3
R7B9 47K
C7B7 35V 10μ
C7B8 35V 10μ
TP38
TP37
TU-COMP
TU-A-L
TU-A-R
SW-12
TU-VIDEO
(STEREO)
TO HIFI
IC7A1 TDA3803A
R L ST/MN MUTE I/II ST 2CH
TP34
L7A3
C7B9 J-3300 (STY)
C7C0 J-1000 (STY)
R7C0 5.6K
TP36
TP35
C7C1 50V .47μ
R7C2 220K
R7C3 220K
R7D4 820K
C7C3 J-.22 (TF)
C7C4 J-.1 (TF)
C7C5 J-.22 (TF)
C7C6 J-.1 (TF)
VR7A1 B-300
VR7A2 B-200
R7C4 18K
R7C5 27K
C7C7 50V .47
R7B8 15K
C7C8 25V 100μ
C7C2 16V 47μ
R7C1 56K
C7D0 50V .47
C7C9 25V 100μ
Q7A5
R7D0 15K
R7C9 15K
Q7A6
Q7A7



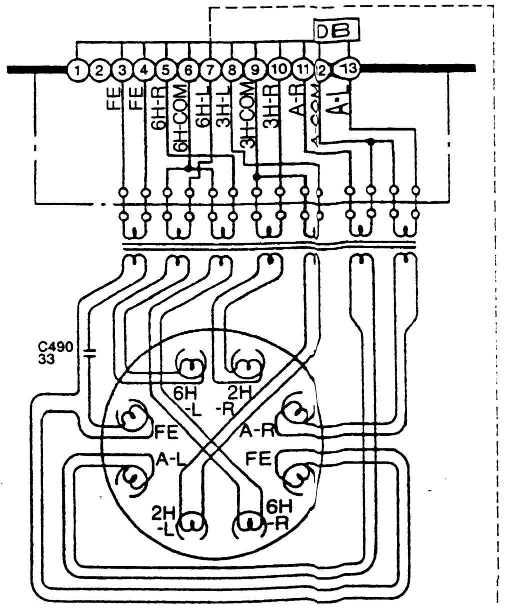
SUPPLY
MUTE LOGIC
1KΩ
0°
90°

IC7A0 TDA2555



500Ω
AM DEMODU-LATOR
PILOT AMPLIFIER
CONTROL VOLTAGE SENSOR
DEMATRIX
A.F. OUTPUT SELECTOR
CONTROL LOGIC
LED DRIVER
IDENTIFI-CATION
SUPPLY
1.2KΩ
200Ω
4.7KΩ
60KΩ

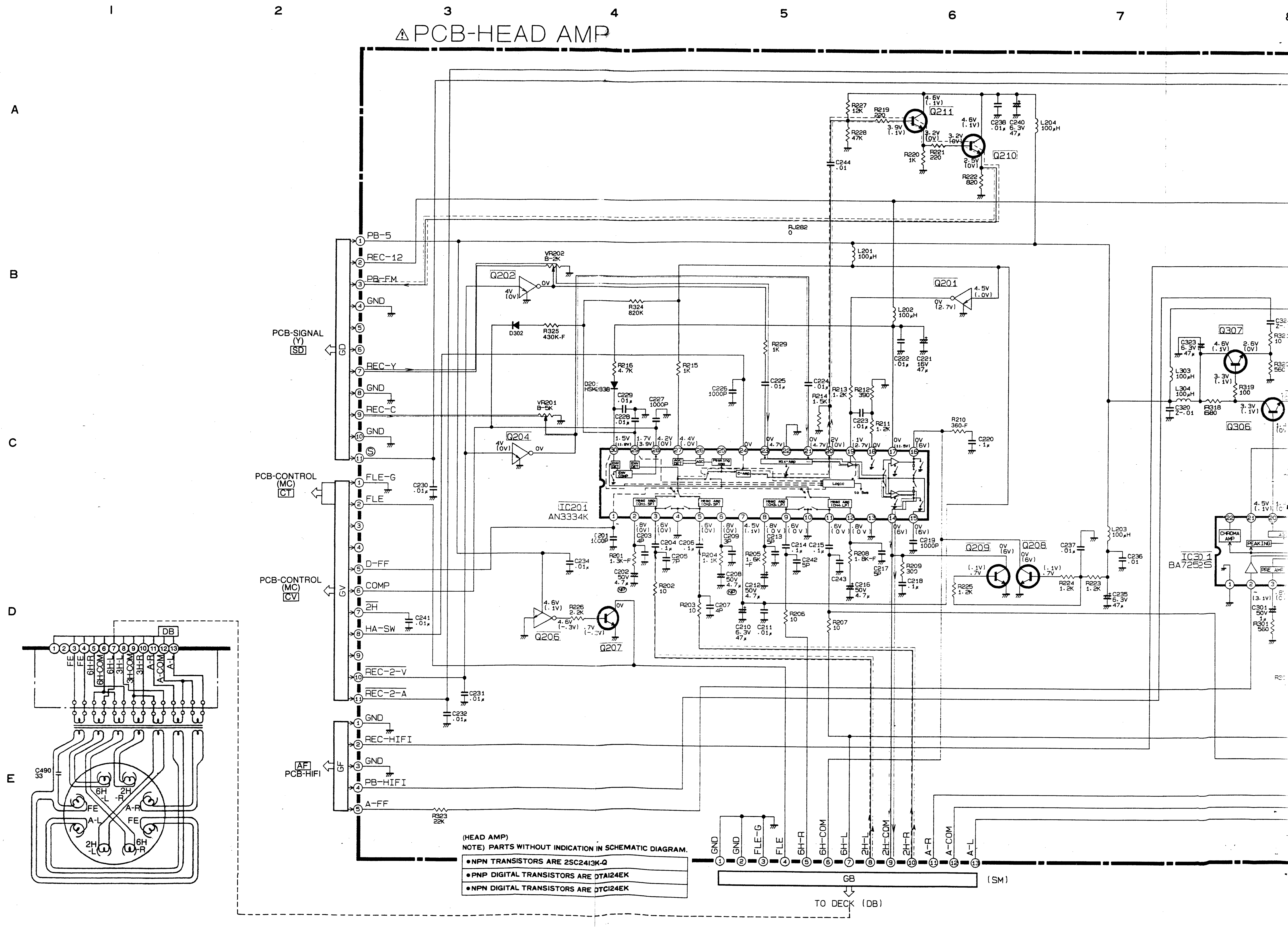
IC7A1 TDA3803A



E
DB
FE
FE
6H-R
6H-COM
6H-L
3H-COM
3H-L
3H-R
A-R
A-COM
A-L
C490 33
6H -L
2H -R
FE
A-R
A-L
FE
2H -L
6H -R

HS-B82 (4/8)
HS-E82
HS-E82(A)(G)(Y)(IR)(NZ)

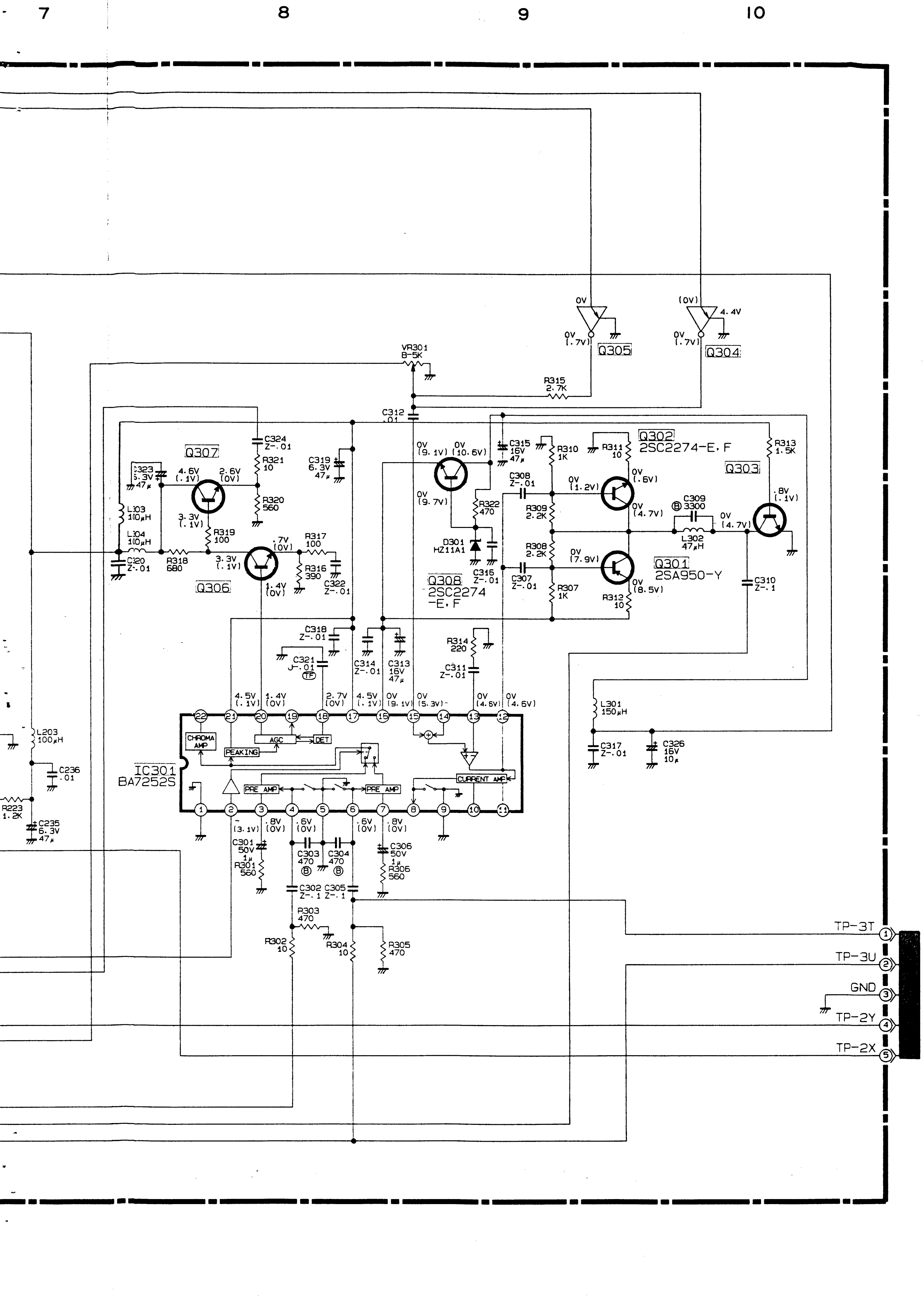
# ⚠PCB-HEAD AMP

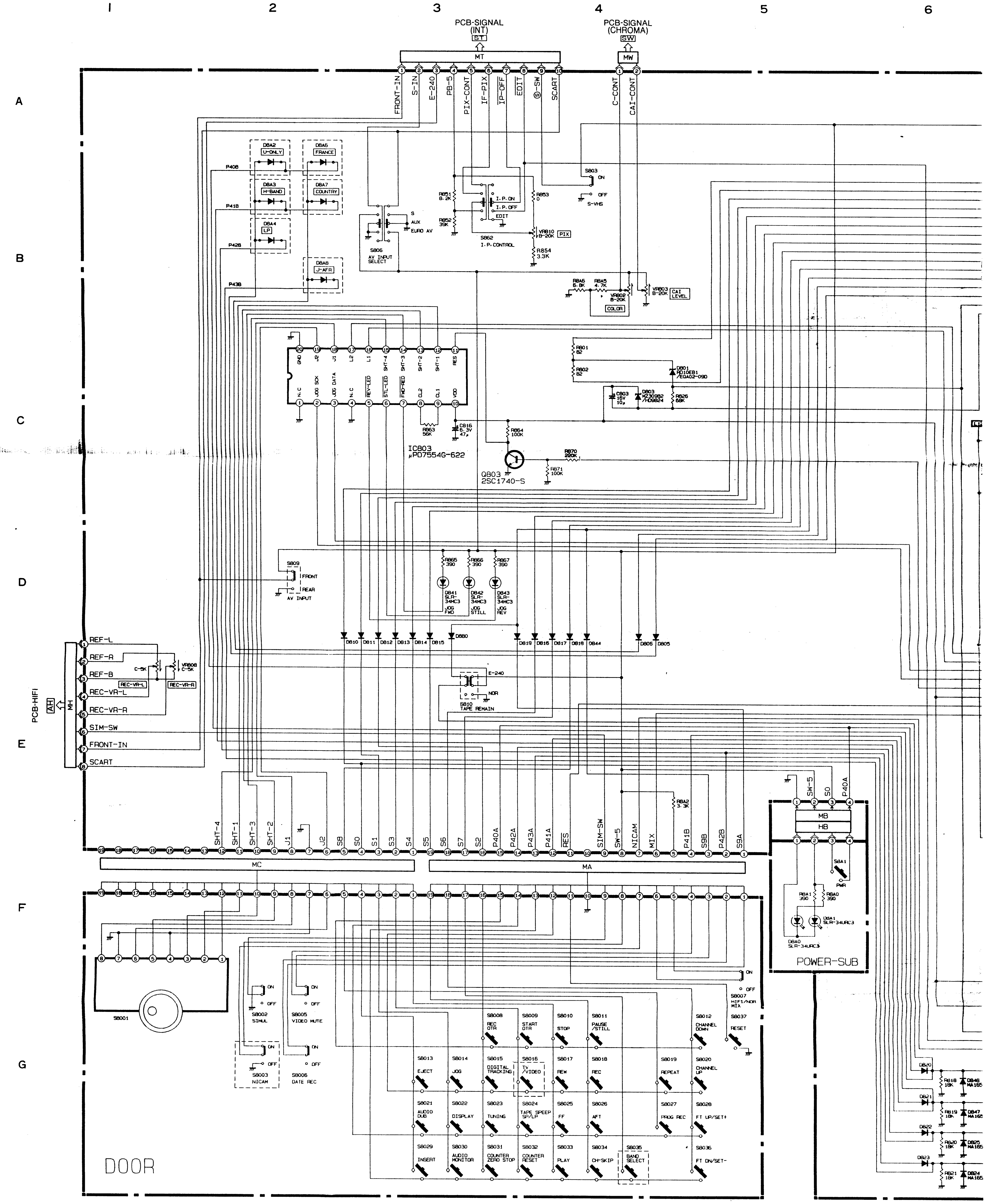

1
2
3
4
5
6
7
A
B
C
D
E
PCB-SIGNAL (Y) SD
GD
PB-5
REC-12
PB-FM
GND
REC-Y
GND
REC-C
GND
S
PCB-CONTROL (MC) CT
FLE-G
FLE
D-FF
COMP
2H
HA-SW
REC-2-V
REC-2-A
PCB-CONTROL (MC) CV
GV
AF PCB-HIFI
GF
GND
REC-HIFI
GND
PB-HIFI
A-FF
R323 22K
C230 .01μ
C231 .01μ
C232 .01μ
C241 .01μ
DB
FE
FE
6H-R
6H-COM
6H-L
3H-L
3H-COM
3H-R
A-R
A-COM
A-L
C490 33
6H -L
2H -R
FE
A-R
A-L
FE
2H -L
6H -R
Q202
Q204
Q206
Q207
Q201
Q211
Q210
Q209
Q208
Q307
Q306
VR202 B-2K
VR201 B-5K
D302
D201 HSM2838
R324 820K
R325 430K-F
R216 4.7K
R215 1K
R229 1K
RJ282 0
L201 100μH
L202 100μH
L203 100μH
L204 100μH
R227 12K
R228 47K
R219 220
R220 1K
R221 220
R222 820
C244 .01
C238 .01μ
C240 6.3V 47μ
C222 .01μ
C221 16V 47μ
C229 .01μ
C228 .01μ
C227 1000P
C226 1000P
C225 .01μ
C224 .01μ
R213 1.2K
R212 390
R214 1.5K
C223 .01μ
R211 1.2K
R210 360-F
C220 .1μ
IC201 AN3334K
C201 1000P
C203 4P
C204 .1μ
C205 7P
C206 .1μ
R201 1.3K-F
C202 50V 4.7μ
R202 10
R204 1.1K
C208 50V 4.7μ
C209 3P
R205 1.6K -F
C212 50V 4.7μ
C213 5P
C214 .1μ
C215 .1μ
C242 5P
C243
R208 1.8K-F
C216 50V 4.7μ
C217 5P
R209 300
C218 .1μ
C219 1000P
R203 10
C207 4P
C210 6.3V 47μ
C211 .01μ
R206 10
R207 10
C234 .01μ
R226 2.2K
C237 .01μ
C236 .01
C235 6.3V 47μ
R224 1.2K
R223 1.2K
R225 1.2K
Head Amp (CH1.SP)
Head Amp (CH2.SP)
Head Amp (CH3.LP)
Head Amp (CH4.LP)
ENV DET
ENV COMP
APC DET
AGC
Peaking Amp
C-Amp
Mix-Amp
Logic
to Sws
GB
(SM)
TO DECK (DB)
GND
GND
FLE-G
FLE
6H-R
6H-COM
6H-L
2H-L
2H-COM
2H-R
A-R
A-COM
A-L
IC301 BA7252S
CHROMA AMP
PEAKING
PRE AMP
C323 6.3V 47μ
L303 100μH
L304 100μH
C320 Z-.01
R318 680
R319 100
C301 50V 1μ
R301 560

(HEAD AMP)

NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

- ●NPN TRANSISTORS ARE 2SC2413K-Q
- ●PNP DIGITAL TRANSISTORS ARE DTA124EK
- ●NPN DIGITAL TRANSISTORS ARE DTC124EK


7
8
9
10
Q305
Q304
0V
(0V)
4.4V
0V (.7V)
VR301 B-5K
R315 2.7K
C312 .01
Q307
4.6V (.1V)
2.6V (0V)
3.3V (.1V)
C323 6.3V 47μ
L103 100μH
L104 100μH
C320 Z-.01
R318 680
R319 100
C324 Z-.01
R321 10
R320 560
Q306
3.3V (.1V)
.7V (0V)
1.4V (0V)
R317 100
R316 390
C322 Z-.01
C319 6.3V 47μ
Q308 2SC2274 -E, F
0V (9.1V)
0V (10.6V)
0V (9.7V)
R322 470
D301 HZ11A1
C315 16V 47μ
C316 Z-.01
R310 1K
R311 10
Q302 2SC2274-E, F
0V (1.2V)
0V (.6V)
0V (4.7V)
C308 Z-.01
R309 2.2K
R308 2.2K
C307 Z-.01
R307 1K
0V (7.9V)
Q301 2SA950-Y
0V (8.5V)
R312 10
C309 Ⓑ 3300
L302 47μH
0V (4.7V)
Q303
R313 1.5K
.8V (.1V)
C310 Z-.1
C318 Z-.01
C321 J-.01 TF
C314 Z-.01
C313 16V 47μ
R314 220
C311 Z-.01
L301 150μH
C317 Z-.01
C326 16V 10μ
4.5V (.1V)
1.4V (0V)
2.7V (0V)
4.5V (.1V)
0V (9.1V)
0V (5.3V)
0V (4.6V)
0V (4.6V)
CHROMA AMP
PEAKING
AGC
DET
CURRENT AMP
PRE AMP
PRE AMP
IC301 BA7252S
(3.1V)
.8V (0V)
.6V (0V)
.6V (0V)
.8V (0V)
C301 50V 1μ
R301 560
C303 470 Ⓑ
C304 470 Ⓑ
C306 50V 1μ
R306 560
C302 Z-.1
C305 Z-.1
R303 470
R302 10
R304 10
R305 470
L203 100μH
C236 .01
R223 1.2K
C235 6.3V 47μ
TP-3T ①
TP-3U ②
GND ③
TP-2Y ④
TP-2X ⑤



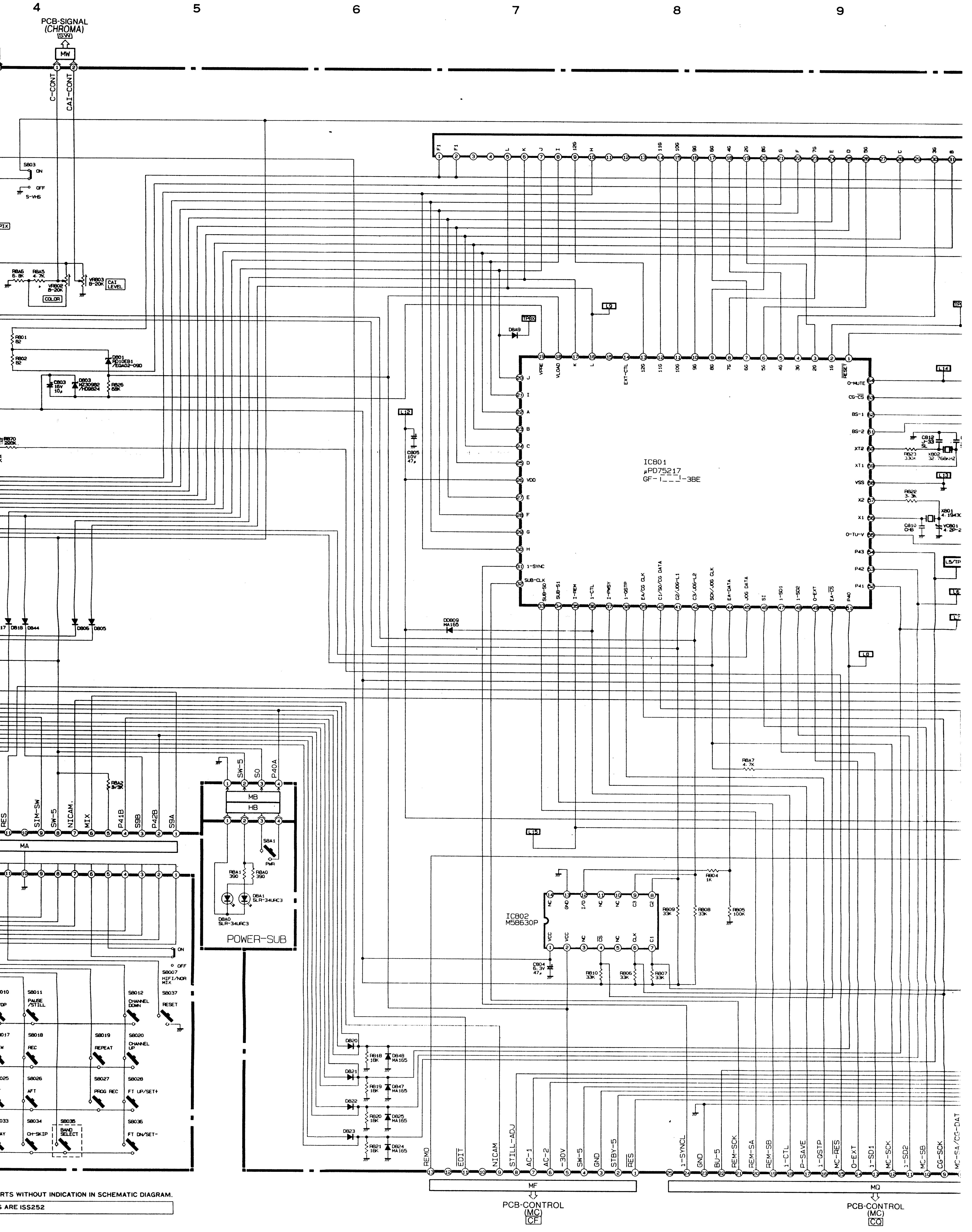
1
2
3
4
5
6
A
B
C
D
E
F
G
PCB-SIGNAL (INT)
ST
MT
FRONT-IN
S-IN
E-240
PB-5
PIX-CONT
IF-PIX
IP-OFF
EDIT
S-SW
SCART
PCB-SIGNAL (CHROMA)
SW
MW
C-CONT
CAI-CONT
D8A2 U-ONLY
D8A6 FRANCE
D8A3 H-BAND
D8A7 COUNTRY
D8A4 LP
D8A8 J-AFR
P40B
P41B
P42B
P43B
S806 AV INPUT SELECT
S
AUX
EURO AV
R851 8.2K
R852 39K
S862 I.P. CONTROL
I.P. ON
I.P. OFF
EDIT
R853 0
VR810 B-20K PIX
R854 3.3K
S803
ON
OFF
S-VHS
R8A6 6.8K
R8A5 4.7K
VR802 B-20K COLOR
VR803 B-20K CAI LEVEL
R801 82
R802 82
D801 RD10EB1 /EQA02-09D
C803 16V 10μ
D803 MZ30982 /HD824
R826 68K
GND
J2
J1
L2
L1
SHT-4
SHT-3
SHT-2
SHT-1
RES
N.C
JOG SCK
JOG DATA
REV-LED
STL-LED
FWD-RED
CL2
CL1
VDD
R863 56K
C816 6.3V 47μ
R864 100K
IC803 μPD7554G-622
Q803 2SC1740-S
R870 220K
R871 100K
S809 FRONT REAR AV INPUT
R865 390
R866 390
R867 390
D841 SLR-34MC3 JOG FWD
D842 SLR-34MC3 JOG STILL
D843 SLR-34MC3 JOG REV
D810
D811
D812
D813
D814
D815
D880
D819
D816
D817
D818
D844
D806
D805
REF-L
REF-R
REF-B
C-5K
VR808 C-5K
REC-VR-L
REC-VR-R
SIM-SW
SCART
PCB-HIFI
AH
MH
E-240
NOR
S810 TAPE REMAIN
R8A2 3.3K
SW-5
S0
P40A
MB
HB
S8A1
PWR
R8A1 390
R8A0 390
D8A1 SLR-34URC3
D8A0 SLR-34URC3
POWER-SUB
SHT-4
SHT-1
SHT-3
SHT-2
J1
J2
S8
S0
S1
S3
S4
S5
S6
S7
S2
P40A
P42A
P43A
P41A
RES
SIM-SW
SW-5
NICAM
MIX
P41B
S9B
P42B
S9A
MC
MA
S8001
S8002 SIMUL
S8005 VIDEO MUTE
S8003 NICAM
S8006 DATE REC
ON
OFF
S8007 HIFI/NOR MIX
S8037 RESET
S8008 REC OTR
S8009 START OTR
S8010 STOP
S8011 PAUSE /STILL
S8012 CHANNEL DOWN
S8013 EJECT
S8014 JOG
S8015 DIGITAL TRACKING
S8016 TV /VIDEO
S8017 REW
S8018 REC
S8019 REPEAT
S8020 CHANNEL UP
S8021 AUDIO DUB
S8022 DISPLAY
S8023 TUNING
S8024 TAPE SPEED SP/LP
S8025 FF
S8026 AFT
S8027 PROG REC
S8028 FT UP/SET+
S8029 INSERT
S8030 AUDIO MONITOR
S8031 COUNTER ZERO STOP
S8032 COUNTER RESET
S8033 PLAY
S8034 CH-SKIP
S8035 BAND SELECT
S8036 FT DN/SET-
DOOR
D820
D821
D822
D823
R818 18K
R819 18K
R820 18K
R821 18K
D846 MA165
D847 MA165
D825 MA165
D824 MA165

## TIMER

| SYMBOL NO.<br>MODELS | D8A2 | D8A3 | D8A7 | S8003 | S8016 | S8035 | D8B6 | D8B7 | A AREA | B AREA | C8B0 | | L8B1 | C AREA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HS-B82 | ○ | × | ○ | ○ | × | × | ○ | × | × | × | × | | × | × | |
| HS-E82(Y) | × | × | × | × | × | ○ | × | ○ | × | × | × | | × | × | |
| HS-E82(1R) | × | × | ○ | ○ | × | ○ | ○ | × | × | × | × | | × | × | |
| HS-E82 | × | ○ | × | ○ | × | ○ | ○ | ○ | × | × | × | | × | × | |
| HS-E82(G) | × | × | × | × | × | ○ | × | ○ | ○ | ○ | ○ | | ○ | ○ | |
| HS-E82(A) | × | × | × | × | ○ | ○ | × | × | × | × | × | | × | × | |
| HS-E82(NZ) | × | × | × | ○ | ○ | ○ | ○ | × | × | × | × | | × | × | |

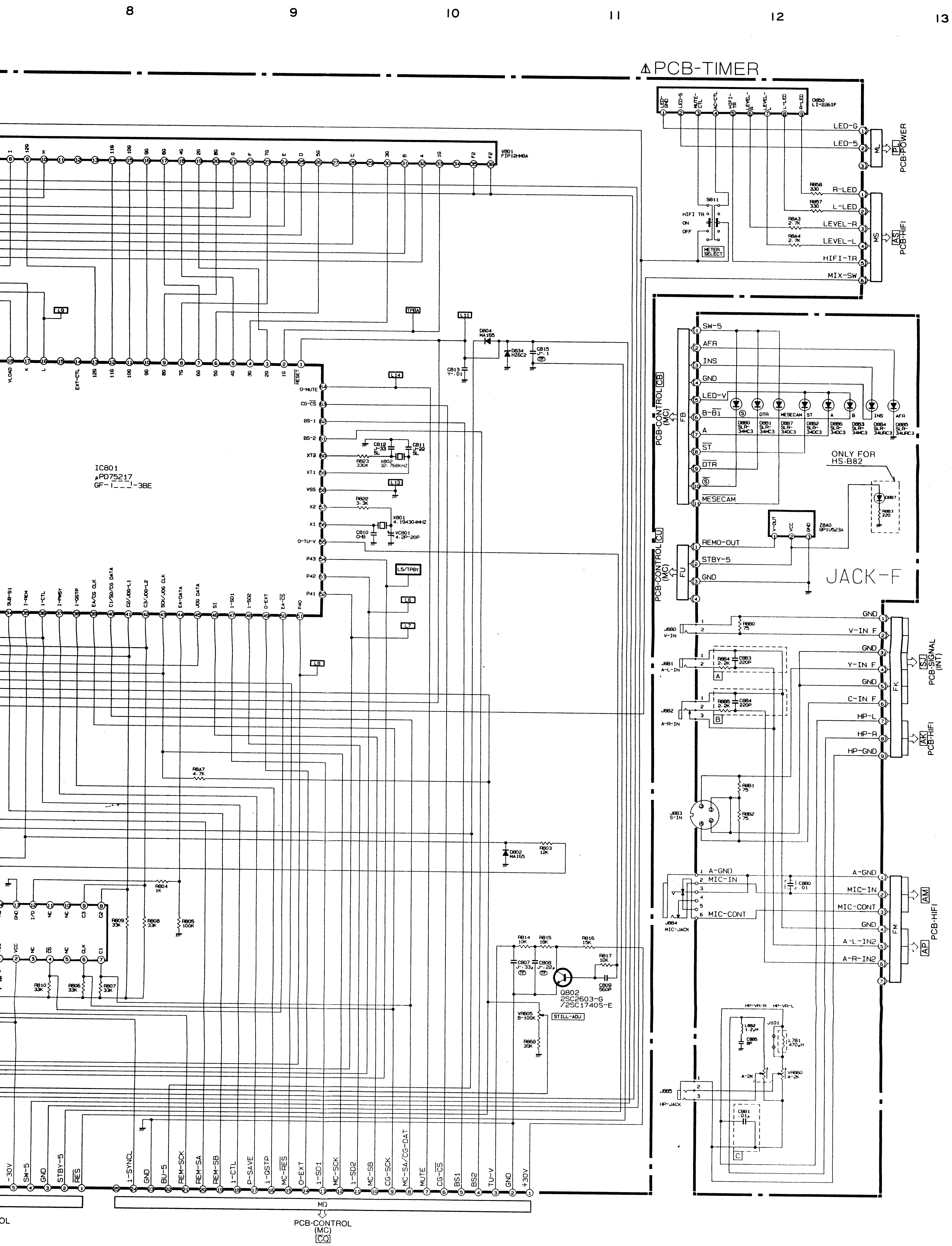
(TIMER)
NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

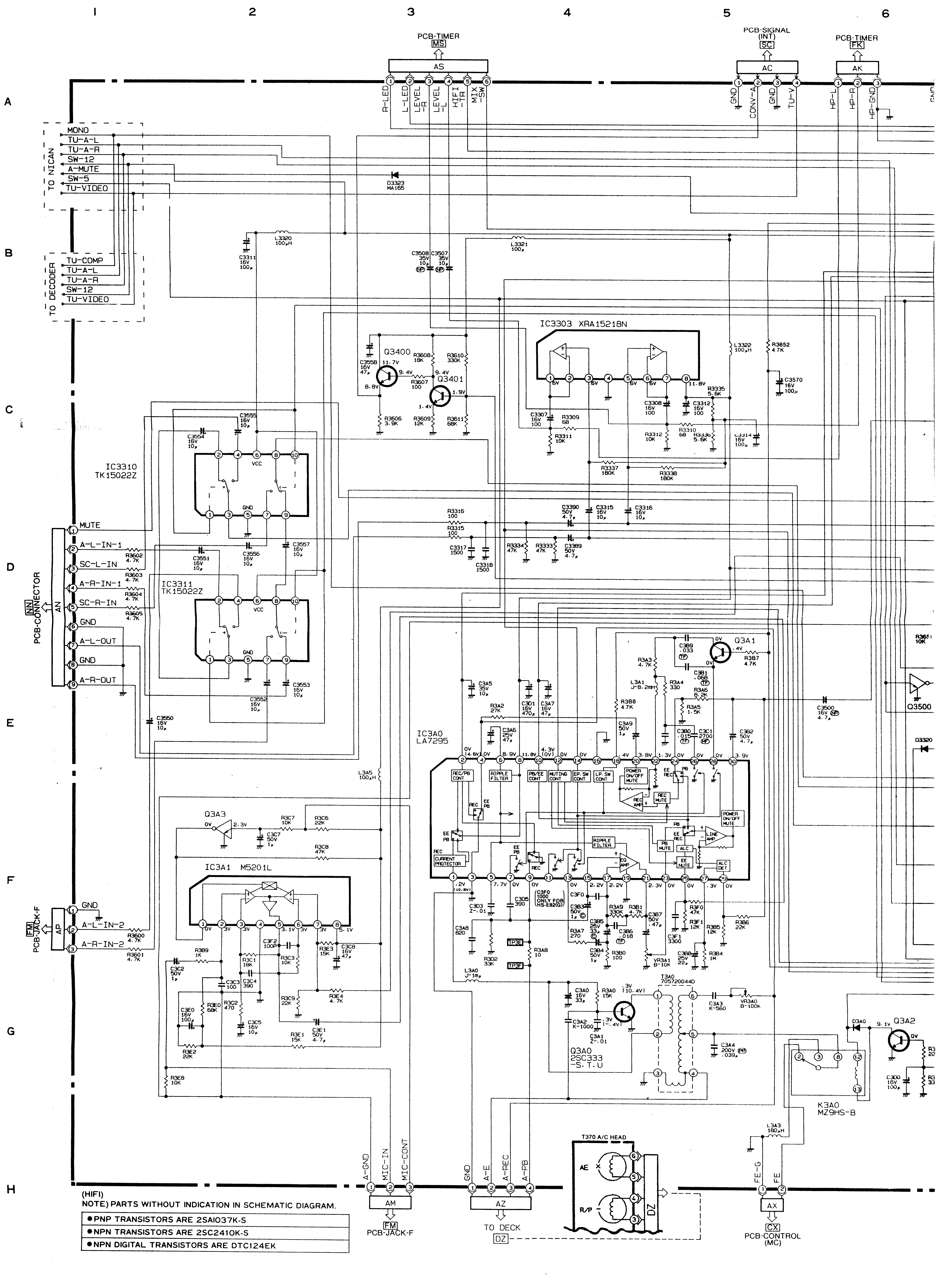
- DIODES ARE ISS252


4
5
6
7
8
9
PCB-SIGNAL
(CHROMA)
SW
MW
C-CONT
CAI-CONT
S803
ON
OFF
S-VHS
PIX
R8A6 6.8K
R8A5 4.7K
VR802 B-20K
COLOR
VR803 B-20K
CAI LEVEL
R801 82
R802 82
D801 RD10EB1 /E0A02-09D
C803 16V 10µ
D803 MZ30982 /HD9824
R826 68K
R870 220K
L9
TP8X
D8A9
L12
C805 10V 47µ
IC801
µPD75217
GF-1___-3BE
RESET
O-MUTE
CG-CS
BS-1
BS-2
XT2
XT1
VSS
X2
X1
O-TU-V
P43
P42
P41
VPRE
VLOAD
EXT-CTL
VDD
1-SYNC
SUB-CLK
SUB-SO
SUB-S1
I-REM
1-CTL
I-PWSY
1-QSTP
EA/CG CLK
C1/SO/CG DATA
C2/JOG-L1
C3/JOG-L2
SCK/JOG CLK
EA-DATA
JOG DATA
SI
1-SD1
1-SD2
O-EXT
EA-CS
P40
L14
C812 33
R823 330K
X802 32.768KHZ
L13
R822 3.3K
X801 4.1943
C810 CH8
VC801 4.2P-2
L5/TP
L6
L7
L8
D806
D805
D818
D844
D8D9 MA165
R8A7 4.7K
L15
IC802
M58630P
NC
GND
I/O
C3
C2
VCC
CS
CLK
C1
R809 33K
R808 33K
R804 1K
R805 100K
C804 6.3V 47µ
R810 33K
R806 33K
R807 33K
R8A2 3.3K
SW-5
SO
P40A
MB
HB
S8A1
PWR
R8A1 390
R8A0 390
D8A0 SLR-34URC3
D8A1 SLR-34URC3
POWER-SUB
RES
SIM-SW
SW-5
NICAM.
MIX
P41B
S9B
P42B
S9A
MA
ON
OFF
S8007 HIFI/NOR MIX
S8037 RESET
S8011 PAUSE /STILL
S8012 CHANNEL DOWN
S8018 REC
S8019 REPEAT
S8020 CHANNEL UP
S8026 AFT
S8027 PROG REC
S8028 FT UP/SET+
S8034 CH-SKIP
S8035 BAND SELECT
S8036 FT DN/SET-
D820
D821
D822
D823
R818 18K
R819 18K
R820 18K
R821 18K
D848 MA165
D847 MA165
D825 MA165
D824 MA165
REMO
EDIT
NICAM
STILL-ADJ
AC-1
AC-2
-30V
SW-5
GND
STBY-5
RES
1-SYNCL
GND
BU-5
REM-SCK
REM-SA
REM-SB
1-CTL
P-SAVE
1-QSTP
MC-RES
O-EXT
1-SD1
MC-SCK
1-SD2
MC-SB
CG-SCK
MC-SA/CG-DAT
MF
PCB-CONTROL
(MC)
CF
MQ
PCB-CONTROL
(MC)
CQ

RTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

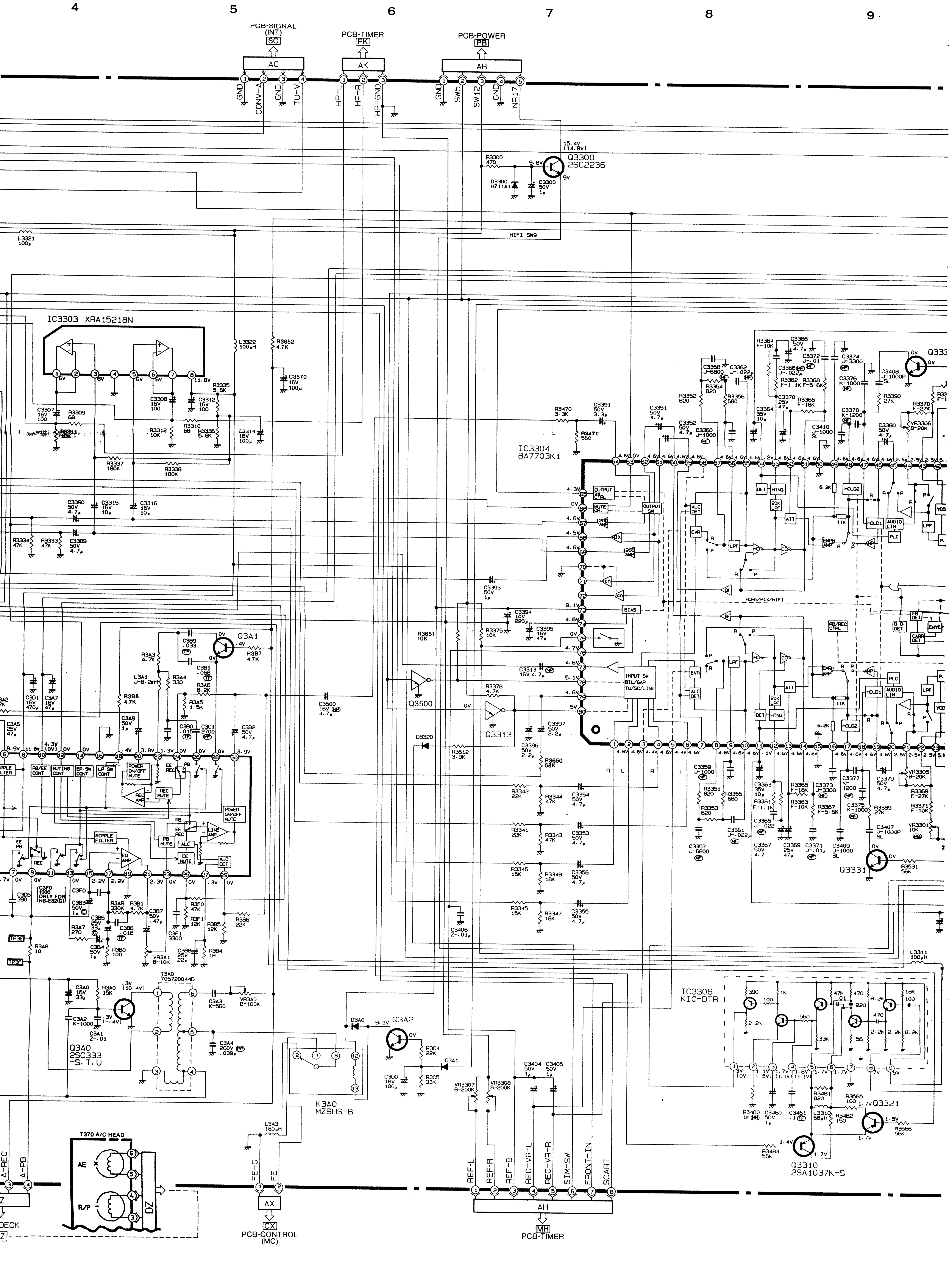
S ARE ISS252

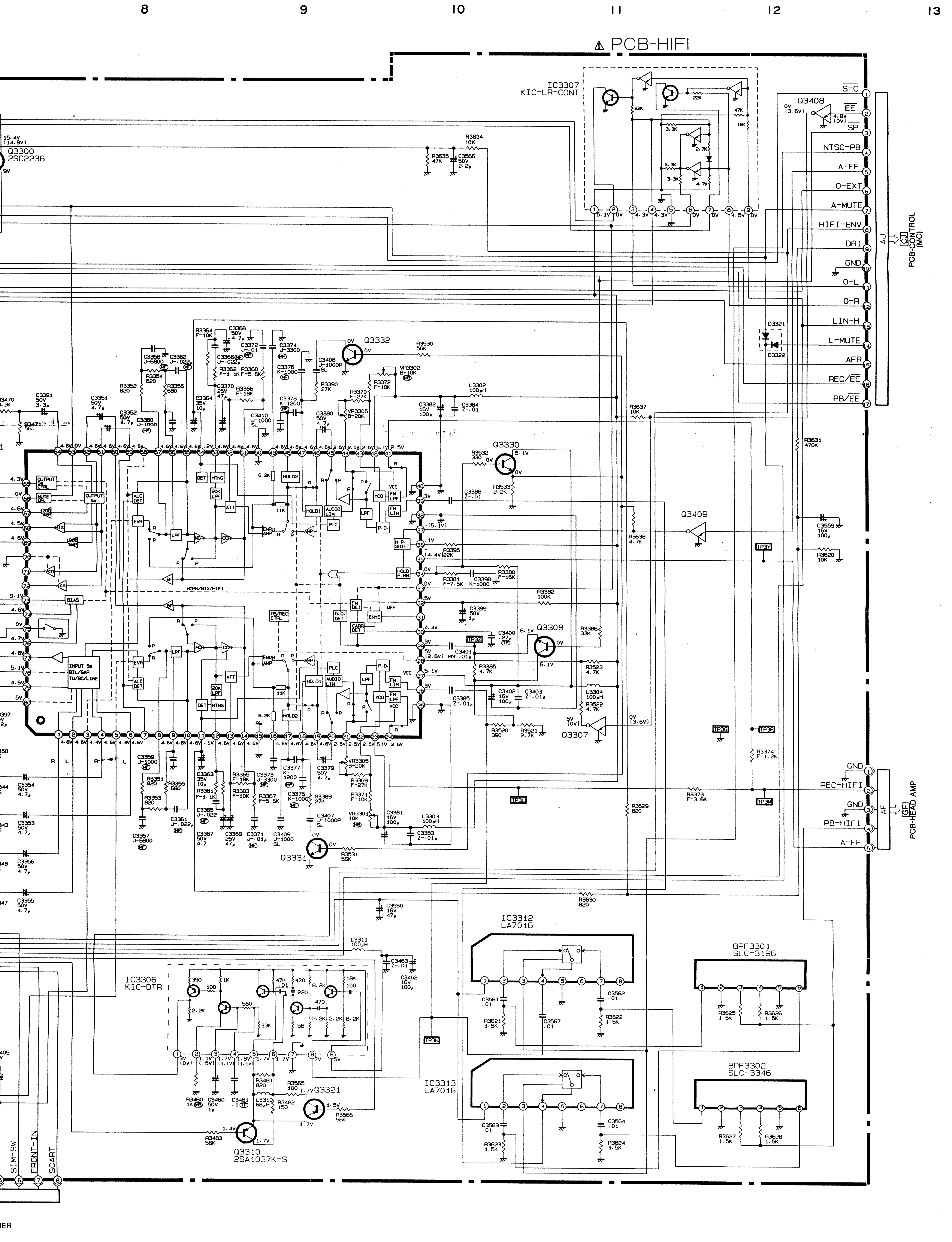

8
9
10
11
12
13
⚠PCB-TIMER
D850
LI-2261F
LED-GND
LED-5
MUTE-CTL
AC-CTL
HIFI-TR
LEVEL-R
LEVEL-L
L-LED
R-LED
LED-G
LED-5
ML
PL
PCB-POWER
R858 330
R-LED
R857 330
L-LED
R8A3 2.7K
LEVEL-R
R8A4 2.7K
LEVEL-L
HIFI-TR
MIX-SW
MS
AS
PCB-HIFI
S811
HIFI TR
ON
OFF
METER SELECT
V801
FIP12HM8A
TP8A
L9
L11
D804
MA165
D834
HZ6C2
C815
C813
L14
IC801
μPD75217
GF-1___1-3BE
O-MUTE
CG-CS
BS-1
BS-2
XT2
XT1
VSS
X2
X1
O-TU-V
P43
P42
P41
C812
C811
R823 330K
X802 32.768KHZ
L13
R822 3.3K
X801 4.194304MHZ
C810 CH8
VC801 4.2P-20P
L5/TP8Y
L6
L7
L8
VLOAD
EXT-CTL
RESET
SUB-S1
I-REM
I-CTL
I-HMSY
I-QSTP
EA/CG CLK
C1/S0/CG DATA
C2/JOG-L1
C3/JOG-L2
SCK/JOG CLK
EA-DATA
JOG DATA
SI
I-SD1
I-SD2
O-EXT
EA-CS
P40
R8A7 4.7K
D802 MA165
R803 12K
R804 1K
R809 33K
R808 33K
R805 100K
R810 33K
R806 33K
R807 33K
R814 10K
R815 18K
R816 15K
R817 10K
C807
C808
C809 560P
Q802
2SC2603-G
/2SC1740S-E
VR805 B-100K
STILL-ADJ
R869 39K
-30V
SW-5
GND
STBY-5
RES
i-SYNCL
GND
BU-5
REM-SCK
REM-SA
REM-SB
I-CTL
P-SAVE
I-QSTP
MC-RES
O-EXT
I-SD1
MC-SCK
I-SD2
MC-SB
CG-SCK
MC-SA/CG-DAT
MUTE
CG-CS
BS1
BS2
TU-V
GND
+30V
MQ
PCB-CONTROL
(MC)
CQ
OL
PCB-CONTROL (MC) CB
FB
SW-5
AFR
INS
GND
LED-V
B-B1
A
ST
DTR
S
MESECAM
D880 SLR-34MC3
D881 SLR-34MC3
D887 SLR-34DC3
D882 SLR-34DC3
D886 SLR-34DC3
D883 SLR-34MC3
D884 SLR-34URC3
D885 SLR-34URC3
ONLY FOR HS-B82
D8B7
R8B3 220
Z8A0
GP1U523X
V-OUT
VCC
GND
PCB-CONTROL (MC) CU
FU
REMO-OUT
STBY-5
GND
JACK-F
J880 V-IN
R880 75
J881 A-L-IN
R884 2.2K
C883 220P
J882 A-R-IN
R885 2.2K
C884 220P
GND
V-IN F
GND
Y-IN F
GND
C-IN F
HP-L
HP-R
HP-GND
FK
SJ
PCB-SIGNAL (INT)
AK
PCB-HIFI
R881 75
J883 S-IN
R882 75
J884 MIC-JACK
A-GND
MIC-IN
MIC-CONT
C880 .01
A-GND
MIC-IN
MIC-CONT
GND
A-L-IN2
A-R-IN2
FM
AM
AP
PCB-HIFI
HP-VR-R
HP-VR-L
L882 1.2μH
C885 8P
J101
L781 470μH
VR880 A-2K
A-2K
J885 HP-JACK
C881 .01μ
C

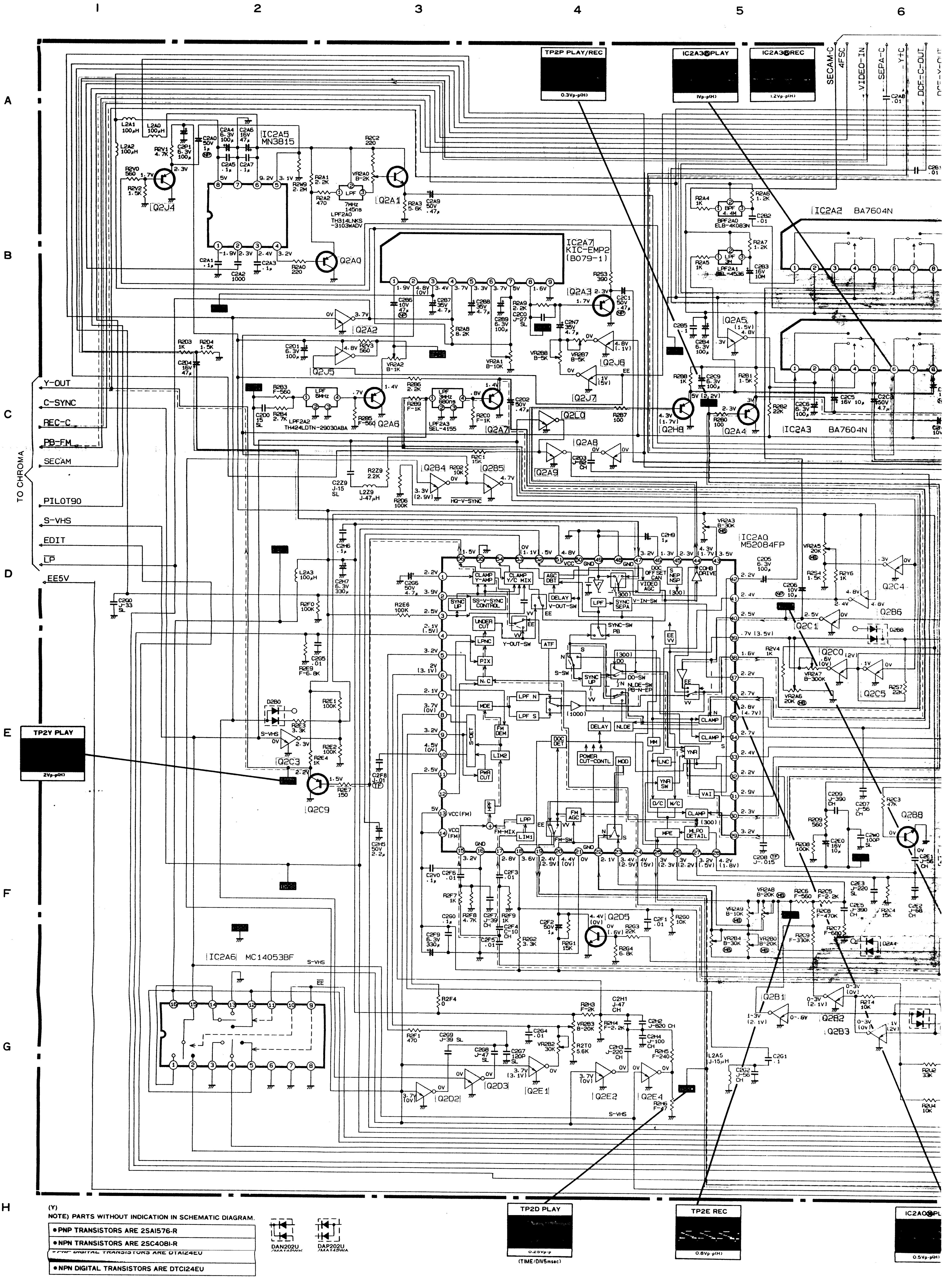

1
2
3
4
5
6
A
B
C
D
E
F
G
H
PCB-TIMER
MS
AS
R-LED
L-LED
LEVEL -R
LEVEL L
HIFI -TR
MIX -SW
PCB-SIGNAL (INT)
SC
AC
GND
CONV-A
GND
TU-V
PCB-TIMER
FK
AK
HP-L
HP-R
HP-GND
TO NICAN
MONO
TU-A-L
TU-A-R
SW-12
A-MUTE
SW-5
TU-VIDEO
D3323 MA165
TO DECODER
TU-COMP
TU-A-L
TU-A-R
SW-12
TU-VIDEO
L3320 100μH
C3311 16V 100μ
L3321 100μ
C3508 35V 10μ
C3507 35V 10μ
IC3303 XRA15218N
L3322 100μH
R3652 4.7K
C3570 16V 100μ
Q3400
Q3401
C3558 16V 47μ
R3608 18K
R3610 330K
R3607 100
R3606 3.9K
R3609 12K
R3611 68K
C3307 16V 100
R3309 68
R3311 10K
C3308 16V 100
C3312 16V 100
R3312 10K
R3310 68
R3336 5.6K
R3335 5.6K
C3314 16V 100μ
R3337 180K
R3338 180K
IC3310 TK15022Z
C3555 16V 10μ
C3554 16V 10μ
VCC
GND
C3390 50V 4.7μ
C3315 16V 10μ
C3316 16V 10μ
R3316 100
R3315 100
C3317 1500
C3318 1500
R3334 47K
R3333 47K
C3389 50V 4.7μ
PCB-CONNECTOR
NN
AN
MUTE
A-L-IN-1
SC-L-IN
A-R-IN-1
SC-R-IN
GND
A-L-OUT
GND
A-R-OUT
R3602 4.7K
R3603 4.7K
R3604 4.7K
R3605 4.7K
C3551 16V 10μ
C3556 16V 10μ
C3557 16V 10μ
IC3311 TK15022Z
C3552 16V 10μ
C3553 16V 10μ
C3550 16V 10μ
Q3A1
C389 .033
C381 .068
R3A3 4.7K
R387 4.7K
L3A1 J-8.2mH
R3A4 330
R3A6 8.2K
R3A5 1.5K
R388 4.7K
C3A9 50V 1μ
C380 .015
C3C1 2700
C382 50V 4.7μ
C3500 16V 4.7μ
Q3500
D3320
R3651 10K
C3A5 35V 10μ
R3A2 27K
C301 16V 470μ
C3A7 16V 47μ
C3A6 25V 47μ
IC3A0 LA7295
L3A5 100μH
REC/PB CONT
RIPPLE FILTER
PB/EE CONT
MUTING CONT
EP. SW CONT
LP. SW CONT
POWER ON/OFF MUTE
REC AMP
REC MUTE
EE
REC
PB
RIPPLE FILTER
EQ AMP
PB MUTE
ALC
EE MUTE
LINE AMP
ALC DET
POWER ON/OFF MUTE
CURRENT PROTECTOR
Q3A3
R3C7 10K
R3C6 22K
C3C7 50V 1μ
R3C8 47K
IC3A1 M5201L
GND
PCB-JACK-F
FM
AP
A-L-IN-2
A-R-IN-2
R3600 4.7K
R3601 4.7K
R389 1K
C3C2 50V 1μ
R3C1 18K
C3F2 100P
R3C3 10K
R3E3 15K
C3C8 16V 47μ
C3C3 100
C3C4 390
C3E0 16V 100μ
R3E0 68K
R3C2 470
C3C5 16V 10μ
R3C9 22K
R3E4 4.7K
C3E1 50V 4.7μ
R3E1 15K
R3E2 22K
R3E8 10K
C303 Z-.01
C305 390
C3F0 1000 ONLY FOR HS-E82(G)
C383 50V 1μ
R3A9 330K
R3B1 4.7K
C387 50V .47μ
R3F0 47K
R3F1 12K
R386 22K
R3A7 270
C385 25V 33μ
C386 .018
C3A8 820
R302 33K
TP3E
TP3F
R3A8 10
C384 50V 1μ
R380 100
VR3A1 B-10K
C3F1 3300
C388 25V 22μ
R385 12K
R384 1M
L3A0 J-1m
C3A0 16V 33μ
R3A0 15K
C3A2 K-1000
C3A1 Z-.01
Q3A0 2SC333 -S.T.U
T3A0 7057200440
C3A3 K-560
VR3A0 B-100K
C3A4 200V .039μ
D3A0
Q3A2
C300 16V 100μ
K3A0 MZ9HS-B
L3A3 180μH
T370 A/C HEAD
AE
R/P
DZ
A-GND
MIC-IN
MIC-CONT
AM
PCB-JACK-F
GND
A-E
A-REC
A-PB
AZ
TO DECK
FE-G
FE
AX
CX
PCB-CONTROL (MC)

(HIFI)
NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

| |
|---|
| ●PNP TRANSISTORS ARE 2SA1037K-S |
| ●NPN TRANSISTORS ARE 2SC2410K-S |
| ●NPN DIGITAL TRANSISTORS ARE DTC124EK |


4
5
6
7
8
9
PCB-SIGNAL (INT)
SC
AC
GND
CONV-A
GND
TU-V
PCB-TIMER
FK
AK
HP-L
HP-R
HP-GND
PCB-POWER
PB
AB
GND
SW5
SW12
GND
NR17
Q3300 2SC2236
R3300 470
D3300 HZ11A1
C3300 50V 1μ
15.4V (14.9V)
9.6V
9V
HIFI SW9
L3321 100μ
IC3303 XRA15218N
L3322 100μH
R3652 4.7K
C3570 16V 100μ
R3335 5.6K
C3307 16V 100
R3309 68
R3311 10K
C3308 16V 100
C3312 16V 100
R3312 10K
R3310 68
R3336 5.6K
C3314 16V 100μ
R3337 180K
R3338 180K
C3390 50V 4.7μ
C3315 16V 10μ
C3316 16V 10μ
R3334 47K
R3333 47K
C3389 50V 4.7μ
IC3304 BA7703K1
R3470 3.3K
R3471 560
C3391 50V 3.3μ
C3351 50V 4.7μ
C3352 50V 4.7μ
R3352 820
R3354 820
C3358 J-6800
C3362 J-.022μ
C3360 J-1000
R3356 680
R3364 F-10K
C3368 50V 4.7μ
C3366 J-.022μ
R3362 F-1.1K
R3368 F-5.6K
C3364 35V 10μ
C3370 25V 47μ
R3366 F-18K
C3372 J-.01
C3374 J-3300
C3376 K-1000
C3378 K-1200
C3410 J-1000 SL
C3408 J-1000P SL
R3390 27K
R3370 F-27K
VR3306 B-20K
C3380 50V 4.7μ
Q3330
OUTPUT SW CTRL
MUTE CTRL
OUTPUT SW
1200 AMP
MIX
VCO
BIAS
ALC DET
EVR
LPF
MCA
CCA
DET
HTNG
20K LPF
ATT
EMPH AMP
HOLD1
HOLD2
AUDIO LIM
PLC
LPF
BPF
MODN/MIX/HIFI
PB/REC CTRL
D.O. DET
ENVE
CARR DET
FM DET
INPUT SW BIL/GAP TU/SC/LINE
C3393 50V 1μ
C3394 10V 220μ
R3375 10K
C3395 16V 47μ
R3651 10K
C3313 16V 4.7μ
R3378 4.7K
Q3500
Q3313
C3500 16V 4.7μ
D3320
R3612 3.9K
C3396 50V 2.2μ
C3397 50V 2.2μ
R3650 68K
R3342 22K
R3344 47K
C3354 50V 4.7μ
R3341 22K
R3343 47K
C3353 50V 4.7μ
R3346 15K
R3348 18K
C3356 50V 4.7μ
R3345 15K
R3347 18K
C3355 50V 4.7μ
C3406 Z-.01μ
C3359 J-1000
R3351 820
R3355 680
R3353 820
C3357 J-6800
C3361 J-.022μ
C3363 35V 10μ
R3361 F-1.1K
C3365 J-.022
C3367 50V 4.7
C3369 25V 47μ
R3365 F-18K
R3363 F-10K
C3371 J-.01μ
C3373 J-3300
C3375 K-1000
R3367 F-5.6K
C3377 K-1200
C3409 J-1000 SL
R3389 27K
C3379 50V 4.7μ
C3407 J-1000P SL
VR3305 B-20K
R3369 F-27K
R3371 F-10K
VR3301 10K
Q3331
R3531 56K
L3311 100μH
IC3306 KIC-DTR
390
100
1K
560
2.2K
33K
47K
.01
470
220
56
8.2K
18K
R3480 1K
C3460 50V 1μ
C3461 .1
R3481 820
L3310 68μH
R3482 150
R3565 100
Q3321
R3566 56K
R3483 56K
Q3310 2SA1037K-S
Q3A1
C3B9 .033
R3B7 4.7K
R3A3 4.7K
L3A1 J-8.2mH
R3A4 330
C3B1 .068
R3A6 8.2K
R3A5 1.5K
R3B8 4.7K
C3A9 50V 1μ
C3B0 .015
C3C1 2700
C3B2 50V 4.7μ
C3D1 16V 470μ
C3A7 16V 47μ
C3A6 25V 47μ
RIPPLE FILTER
PB/EE CONT
MUTING CONT
EP. SW CONT
LP. SW CONT
POWER ON/OFF MUTE
REC AMP
REC MUTE
EE REC
PB
EE PB
REC
PB MUTE
EE REC
ALC
LINE AMP
POWER ON/OFF MUTE
EQ AMP
EE MUTE
ALC DET
C3F0 1000 ONLY FOR HS-E82(G)
C305 390
C3B3 50V 1μ
R3A9 330K
R3B1 4.7K
C3B7 50V .47μ
R3F0 47K
R3F1 12K
R3B5 12K
R3B6 22K
C3B5 25V 33μ
C3B6 .018
R3A7 270
C3B4 50V 1μ
R3B0 100
C3F1 3300
VR3A1 B-10K
C3B8 25V 22μ
R3B4 1M
TP3E
TP3F
R3A8 10
C3A0 16V 33μ
R3A0 15K
C3A2 K-1000
C3A1 Z-.01
Q3A0 2SC333 -S.T.U
T3A0 705720044D
C3A3 K-560
VR3A0 B-100K
C3A4 200V .039μ
D3A0
9.1V
Q3A2
R3C4 22K
D3A1
C300 16V 100μ
R3C5 33K
K3A0 MZ9HS-B
VR3307 B-200K
VR3308 B-200K
C3404 50V 1μ
C3405 50V 1μ
L3A3 180μH
FE-G
FE
AX
CX
PCB-CONTROL (MC)
T370 A/C HEAD
AE
R/P
DZ
A-REC
A-PB
DECK
REF-L
REF-R
REF-B
REC-VR-L
REC-VR-R
SIM-SW
FRONT-IN
SCART
AH
MH
PCB-TIMER

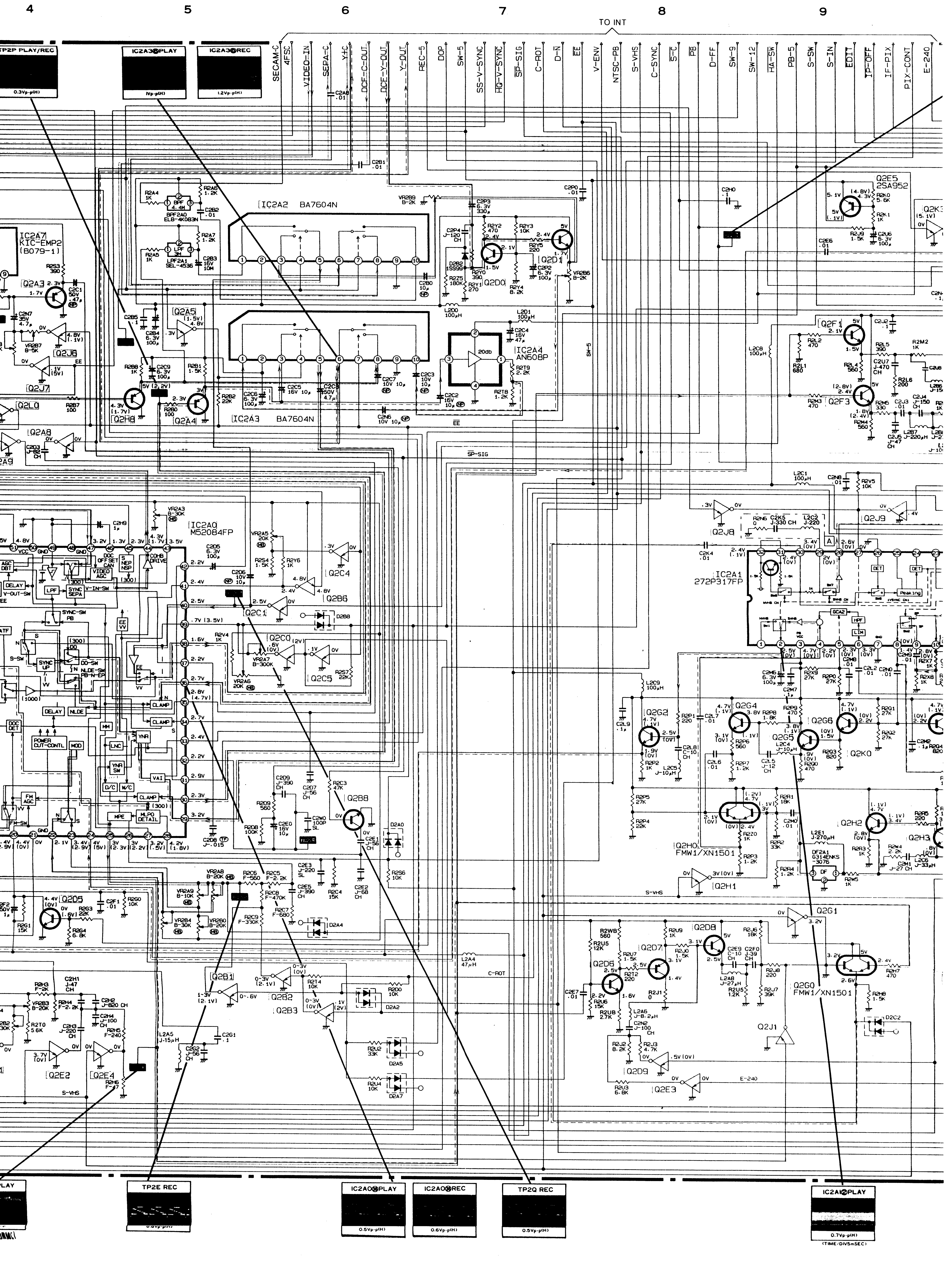

8
9
10
11
12
13
⚠ PCB-HIFI
IC3307
KIC-LR-CONT
Q3300
2SC2236
Q3408
S-C
EE
SP
NTSC-PB
A-FF
O-EXT
A-MUTE
HIFI-ENV
DRI
GND
O-L
O-R
LIN-H
L-MUTE
AFR
REC/EE
PB/EE
AJ
CJ
PCB-CONTROL (MC)
D3321
D3322
Q3332
Q3330
Q3409
Q3308
Q3307
Q3331
TP3Y
TP3G
TP3R
TP3L
TP3H
TP3N
TP32
GND
REC-HIFI
GND
PB-HIFI
A-FF
AF
GF
PCB-HEAD AMP
IC3312
LA7016
IC3313
LA7016
BPF3301
SLC-3196
BPF3302
SLC-3346
IC3306
KIC-DTR
Q3321
Q3310
2SA1037K-S
SIM-SW
FRONT-IN
SCART
OUTPUT SW CTRL
MUTE CTRL
OUTPUT SW
INPUT SW BIL/GAP TU/SC/LINE
BIAS
ALC DET
EVR
LPF
MCA
CCA
DET
HTNG
20K LPF
ATT
HOLD2
HOLD1
AUDIO LIM
PLC
EMPH AMP
AMP
P.O.
YCO
FM LPF
FM LIM
M.P. SHIFT
HOLD P.HH
FM DET
ENYE
OFF
D.O. DET
CARR DET
PB/REC CTRL
HORN/MIX/HIFI
VR3302
VR3306
VR3305
VR3301
L3302
L3303
L3304
L3311
L3310
ER


1
2
3
4
5
6
A
B
C
D
E
F
G
H
TP2P PLAY/REC
0.3Vp-p(H)
IC2A3⑥PLAY
1Vp-p(H)
IC2A3⑥REC
1.2Vp-p(H)
SECAM-C
4FSC
VIDEO-IN
SEPA-C
Y+C
DCF-C-OUT
IC2A5
MN3815
IC2A7
KIC-EMP2
(B079-1)
IC2A2 BA7604N
IC2A3 BA7604N
IC2A0
M52084FP
IC2A6 MC14053BF
LPF2A0
TH314LNKS
-3103WADV
LPF2A2
TH424LDTN-29030ABA
LPF2A3
SEL-4155
BPF2A0
ELB-4K083N
LPF2A1
SEL-4536
Q2J4
Q2A1
Q2A0
Q2A2
Q2A3
Q2A5
Q2J5
Q2J6
Q2J7
Q2A6
Q2A7
Q2L0
Q2A8
Q2A9
Q2B4
Q2B5
Q2H8
Q2A4
Q2C4
Q2B6
Q2C1
Q2C0
Q2C5
Q2C3
Q2C9
Q2B8
Q2D5
Q2B1
Q2B2
Q2B3
Q2D2
Q2D3
Q2E1
Q2E2
Q2E4
D2B0
D2B8
D2A4
HQ-V-SYNC
Y-OUT
C-SYNC
REC-C
PB-FM
SECAM
PILOT90
S-VHS
EDIT
LP
EE5V
TO CHROMA
CLAMP Y-AMP
CLAMP Y/C MIX
AGC DET
DOC OFFSET CAN
S NEP NSP
COMB DRIVE
VIDEO AGC
SYNC UP
SS-V-SYNC CONTROL
DELAY
V-OUT-SW
LPF
SYNC SEPA
V-IN-SW
UNDER CUT
Y-OUT-SW
SYNC-SW PB
ATF
LPNC
PIX
N.C
SYNC UP
DO-SW
NLDE-SW PB-N-EP
MDE
LPF N
LPF S
FM DEM
S-DET
LIM2
PWR CUT
DELAY
NLDE
DOC DET
POWER CUT-CONTL
MOD
CLAMP
MM
LNC
YNR
YNR SW
O/C
W/C
VAI
CLAMP
MPE
MLPO DETAIL
HPF
LPP
FM-MIX
LIM1
FM AGC
FM-SW
VCC(FM)
GND
TP2Y PLAY
2Vp-p(H)
TP2D PLAY
0.25Vp-p
(TIME/DIV5msec)
TP2E REC
0.8Vp-p(H)
IC2A0⑧PL
0.5Vp-p(H)
DAN202U
/MA142WK
DAP202U
/MA142WA

(Y)

NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

- ● PNP TRANSISTORS ARE 2SA1576-R
- ● NPN TRANSISTORS ARE 2SC4081-R
- ● PNP DIGITAL TRANSISTORS ARE DTA124EU
- ● NPN DIGITAL TRANSISTORS ARE DTC124EU


4
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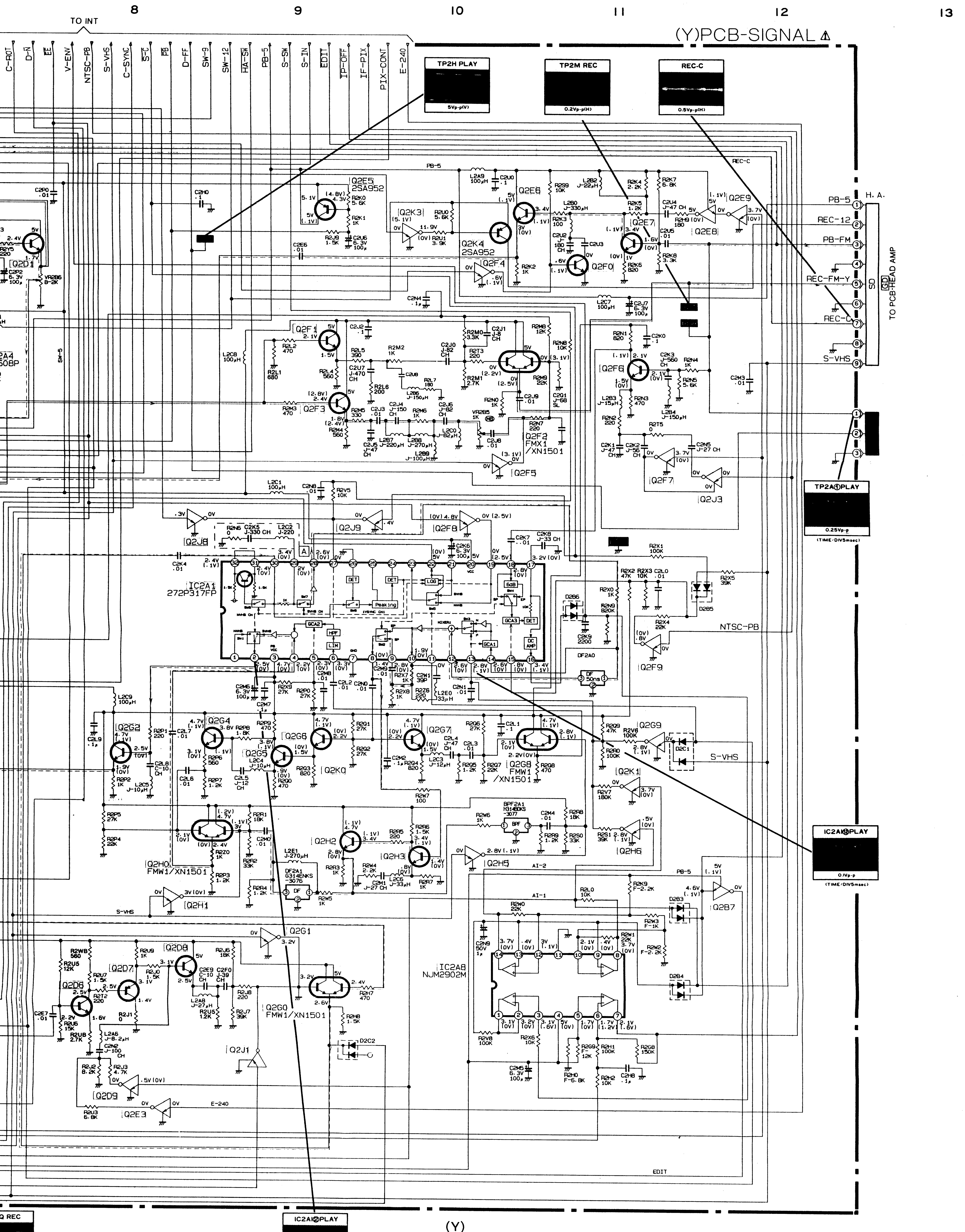
8
9
TO INT
TP2P PLAY/REC
0.3Vp-p(H)
IC2A3 PLAY
1Vp-p(H)
IC2A3 REC
1.2Vp-p(H)
SECAM-C
4FSC
VIDEO-IN
SEPA-C
Y+C
DCF-C-OUT
DCF-Y-OUT
Y-OUT
REC-5
DOP
SW-5
SS-V-SYNC
HQ-V-SYNC
SP-SIG
C-ROT
D-N
EE
V-ENV
NTSC-PB
S-VHS
C-SYNC
S-C
PB
D-FF
SW-9
SW-12
HA-SW
PB-5
S-SW
S-IN
EDIT
IP-OFF
IF-PIX
PIX-CONT
E-240
IC2A7
KIC-EMP2
(B079-1)
IC2A2 BA7604N
IC2A3 BA7604N
IC2A4
AN608P
20db
BPF2A0
ELB-4K083N
LPF2A1
SEL-4536
Q2A3
Q2A5
Q2J6
Q2J7
Q2L0
Q2A8
Q2H8
Q2A4
Q2D0
Q2D1
Q2E5
2SA952
Q2F1
Q2F3
IC2A0
M52084FP
AGC DET
DELAY
V-OUT-SW
LPF
SYNC SEPA
V-IN-SW
VIDEO AGC
DOC OFFSET CAN
NEP NSP
COMB DRIVE
SYNC-SW PB
ATF
S-SW
SYNC UP
DO-SW
NLDE-SW
PB-N-EP
CLAMP
DELAY
NLDE
DOC DET
POWER CUT-CONTL
MOD
MM
LNC
YNR
YNR SW
VAI
D/C
W/C
CLAMP
FM AGC
FM-SW
MPE
MLPO DETAIL
Q2C4
Q2B6
Q2C1
Q2C0
Q2C5
Q2B8
D2B8
D2A0
D2A4
D2A2
D2A5
D2A7
Q2D5
Q2B1
Q2B2
Q2B3
Q2E2
Q2E4
S-VHS
C-ROT
SP-SIG
IC2A1
272P317FP
Peaking
Q2J8
Q2J9
Q2G2
Q2G4
Q2G5
Q2G6
Q2K0
Q2H0
FMW1/XN1501
Q2H1
Q2H2
Q2H3
DF2A1
G314ENKS
-3076
Q2G1
Q2G0
FMW1/XN1501
D2C2
Q2D6
Q2D7
Q2D8
Q2D9
Q2E3
Q2J1
E-240
TP2E REC
0.8Vp-p(H)
IC2A0 PLAY
0.5Vp-p(H)
IC2A0 REC
0.6Vp-p(H)
TP2Q REC
0.5Vp-p(H)
IC2A1 PLAY
0.7Vp-p(H)
(TIME/DIV5mSEC)


8
9
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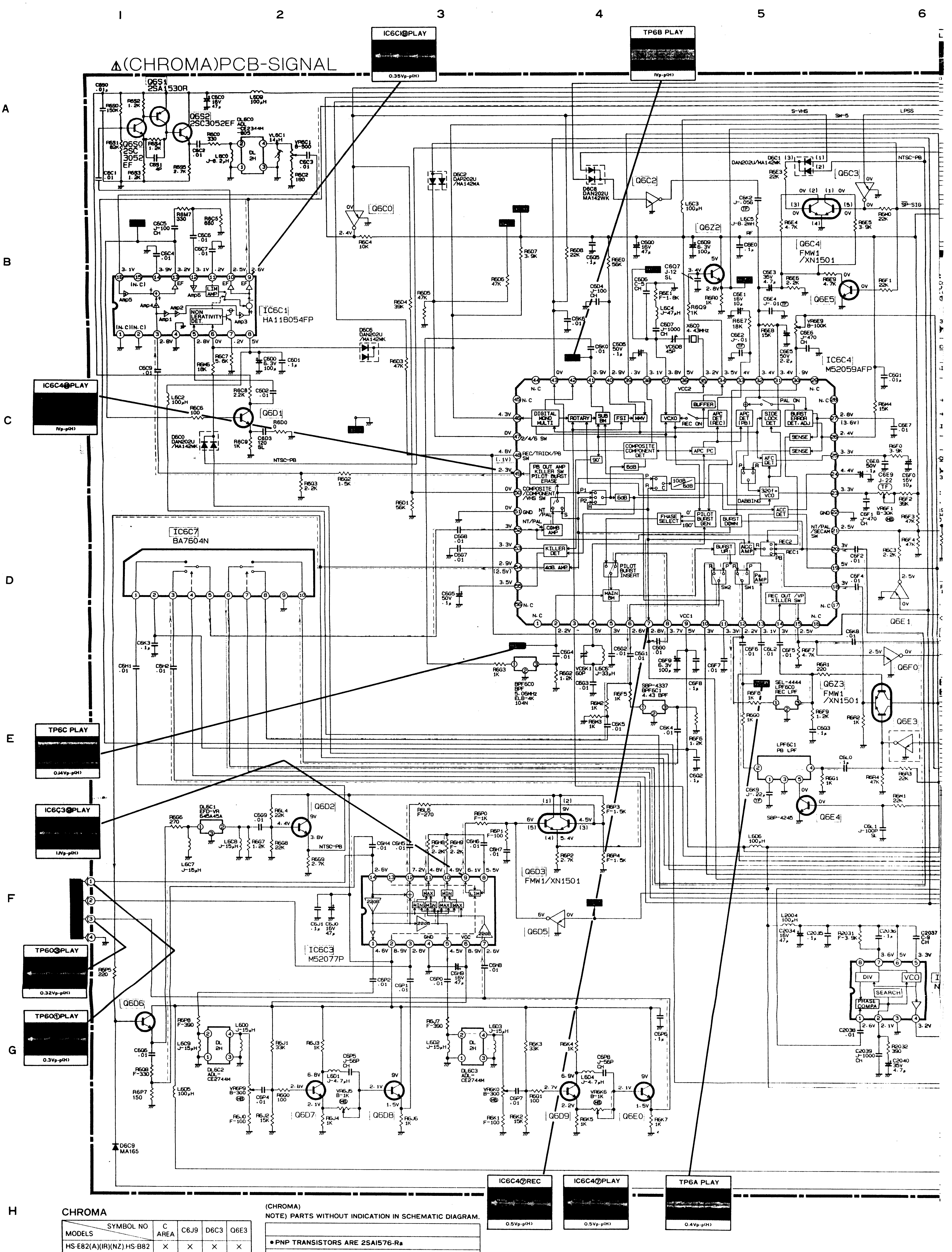
11
12
13
TO INT
(Y)PCB-SIGNAL ⚠
C-ROT
D-N
EE
V-ENV
NTSC-PB
S-VHS
C-SYNC
S-C
PB
D-FF
SW-9
SW-12
HA-SW
PB-5
S-SW
S-IN
EDIT
IP-OFF
IF-PIX
PIX-CONT
E-240
TP2H PLAY
5Vp-p(V)
TP2M REC
0.2Vp-p(H)
REC-C
0.5Vp-p(H)
H. A.
PB-5
REC-12
PB-FM
REC-FM-Y
REC-C
S-VHS
SD
TO PCB HEAD AMP
TP2A①PLAY
0.25Vp-p
(TIME/DIV5msec)
IC2A⑬PLAY
0.1Vp-p
(TIME/DIV5msec)
IC2A②PLAY
(TIME/DIV5mSEC)
Q REC
IC2A1
272P317FP
IC2A8
NJM2902M
Q2E5
2SA952
Q2K4
2SA952
Q2F2
FMX1
/XN1501
Q2G8
FMW1
/XN1501
Q2H0
FMW1/XN1501
Q2G0
FMW1/XN1501
BPF2A1
H3148DKS
-3077
DF2A1
G314ENKS
-3076
DF2A0
NTSC-PB
S-VHS
AI-1
AI-2
EDIT
E-240

(Y)

| SYMBOL NO.<br>MODELS | C2U8 | R2F4 | Q2B4 | C2Z9<br>L2Z9<br>R2Z9 |
|---|---|---|---|---|
| HS-B82,HS-E82(IR) | 180 | ○ | ○ | × |
| HS-E82 | 180 | ○ | ○ | × |
| HS-E82(A)(Y)(NZ) | 180 | ○ | ○ | × |
| HS-E82(G) | 270 | × | × | ○ |

# ⚠(CHROMA)PCB-SIGNAL



1
2
3
4
5
6
A
B
C
D
E
F
G
H
IC6C1⑮PLAY
0.35Vp-p(H)
TP68 PLAY
1Vp-p(H)
IC6C4㊽PLAY
1Vp-p(H)
TP6C PLAY
0.14Vp-p(H)
IC6C3⑬PLAY
1.1Vp-p(H)
TP60③PLAY
0.32Vp-p(H)
TP60①PLAY
0.3Vp-p(H)
IC6C4⑦REC
0.5Vp-p(H)
IC6C4⑦PLAY
0.5Vp-p(H)
TP6A PLAY
0.4Vp-p(H)
Q6S1 2SA1530R
Q6S2 2SC3052EF
Q6S0 2SC3052EF
DL6C0 ADL-CE2344H-B05
IC6C1 HA118054FP
NON LERATIVITY DET.
LIM AMP
Q6C0
D6C2 DAP202U/MA142WA
D6C6 DAN202U/MA142WK
Q6D1
D6C0 DAN202U/MA142WK
NTSC-PB
D6C8 DAN202U MA142WK
Q6C2
Q6Z2
X6C0 4.43MHz
DAN202U/MA142WK
D6C1
Q6C3
Q6C4 FMW1/XN1501
Q6E5
S-VHS
SW-5
LPSS
NTSC-PB
SP-SIG
IC6C4 M52059AFP
DIGITAL MONO MULTI
ROTARY
SUB BM
FSI
MMV
VCXO
REC ON
APC DET (REC)
APC DET (PB)
BUFFER
SIDE LOCK DET
BURST ERROR DET. ADJ
PAL ON
SENSE
COMPOSITE COMPONENT DET
APC PC
AFC DET
PB OUT AMP KILLER SW PILOT BURST ERASE
REC/TRICK/PB SW
COMPOSITE /COMPONENT /VHS SW
NT/PAL
COMB AMP
KILLER DET
4dB AMP
PILOT BURST INSERT
MAIN BM
FHASE SELECT
PILOT BURST GEN
BURST DOWN
320fH VCO
DABBING
ACC DET
BURST UP
ACC AMP
REC1
REC2
SW2
SW1
Pa AMP
REC OUT /VP KILLER SW
NT/PAL /SECAM SW
VCC1
VCC2
IC6C7 BA7604N
BPF6C0 BPF 5.06MHz ELB-4K 104N
SBP-4337 BPF6C1 4.43 BPF
SEL-4444 LPF6C0 REC LPF
Q6Z3 FMW1 /XN1501
Q6F0
Q6E1
Q6E3
LPF6C1 PB LPF
SBP-4245
Q6E4
DL6C1 EFD-VR 545A45A
Q6D2
Q6D3 FMW1/XN1501
Q6D5
IC6C3 M52077P
MAX
MIN
LIM
22dB
Q6D6
DL6C2 ADL-CE2744M
DL6C3 ADL-CE2744M
Q6D7
Q6D8
Q6D9
Q6E0
D6C9 MA165
DIV
VCO
SEARCH
PHASE COMPA

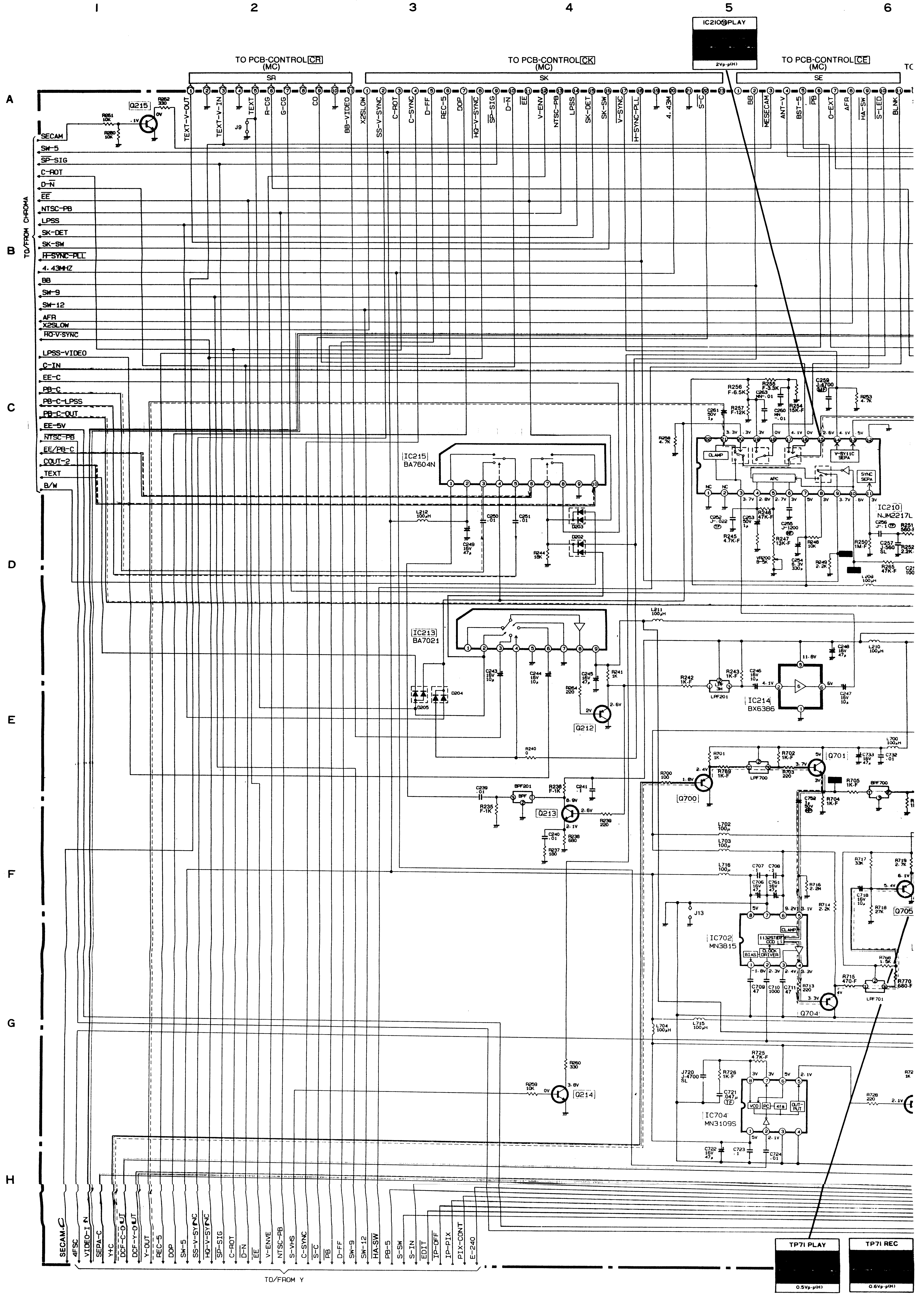
## CHROMA

| SYMBOL NO / MODELS | C AREA | C6J9 | D6C3 | Q6E3 |
|---|---|---|---|---|
| HS-E82(A)(IR)(NZ).HS-B82 | × | × | × | × |
| HS-E82.HS-E82(Y) | ○ | ○ | ○ | ○ |
| HS-E82(G) | ○ | ○ | ○ | ○ |

(CHROMA)

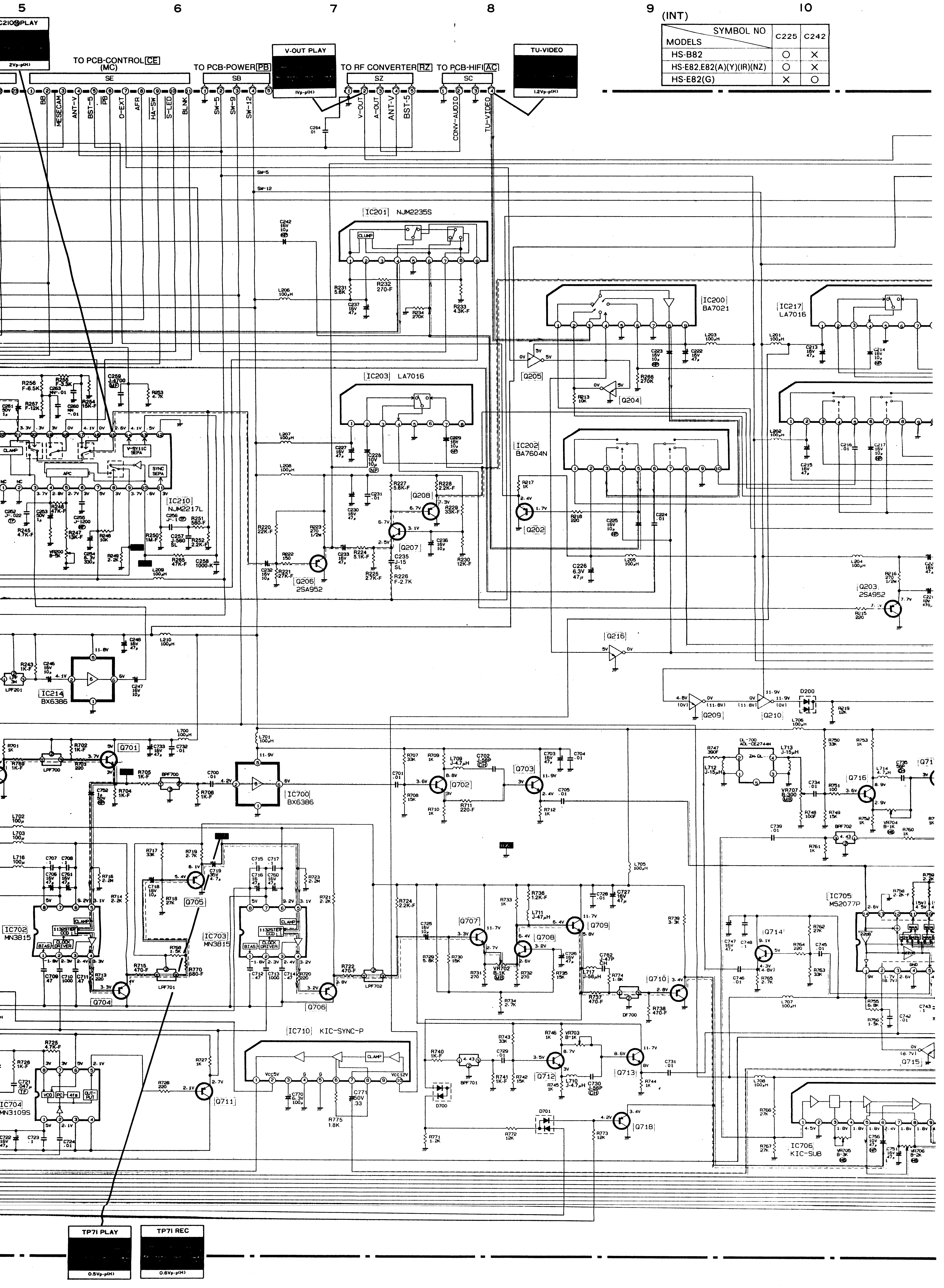
NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

- PNP TRANSISTORS ARE 2SA1576-Ra
- NPN TRANSISTORS ARE 2SC4081-Ra
- PNP DIGITAL TRANSISTORS ARE DTA124EU
- NPN DIGITAL TRANSISTORS ARE DTC124EU


1
2
3
4
5
6
A
B
C
D
E
F
G
H
TO PCB-CONTROL CR (MC)
SR
TO PCB-CONTROL CK (MC)
SK
TO PCB-CONTROL CE (MC)
SE
IC210⑮ PLAY
2Vp-p(H)
TEXT-V-OUT
TEXT-V-IN
TEXT
R-CG
G-CG
CO
BB-VIDEO
X2SLOW
SS-V-SYNC
C-ROT
C-SYNC
D-FF
REC-5
DOP
HQ-V-SYNC
SP-SIG
D-N
EE
V-ENV
NTSC-PB
LPSS
SK-DET
SK-SW
V-SYNC
H-SYNC-PLL
4.43M
S-C
BB
MESECAM
ANT-V
BST-5
PB
O-EXT
AFR
HA-SW
S-LED
BLNK
Q215
R262 330
R261 10K
R260 10K
J9
TO/FROM CHROMA
SECAM
SW-5
SP-SIG
C-ROT
D-N
EE
NTSC-PB
LPSS
SK-DET
SK-SW
H-SYNC-PLL
4.43MHZ
BB
SW-9
SW-12
AFR
X2SLOW
HQ-V-SYNC
LPSS-VIDEO
C-IN
EE-C
PB-C
PB-C-LPSS
PB-C-OUT
EE-5V
NTSC-PB
EE/PB-C
COUT-2
TEXT
B/W
IC215 BA7604N
L212 100μH
C250 .01
C251 .01
C249 16V 47μ
D203
D202
R244 18K
IC213 BA7021
C243 16V 10μ
C244 16V 10μ
C245 16V 47μ
R264 220
R241 1K
D205
D204
Q212
R240 0
C239 .01
BPF201
BPF
R235 F-1K
R236 F-1K
C241 .1
Q213
R239 220
C240 .01
R238 680
R237 180
R259 10K
R250 330
Q214
IC210 NJM2217L
CLAMP
APC
V-SYNC SEPA
SYNC SEPA
R256 F-6.5K
R255 F-3.3K
C263 MN-.01
R254 15K-F
C259 J-4700
R253 4.7K
C261 50V 1μ
R257 F-12K
C260 MN .01
R258 4.7K
C252 J-.022
C253 50V 1μ
R246 47K-F
R245 4.7K-F
C255 J-1200
R247 13K-F
VR200 B-5K
C254 6.3V 330μ
R248 10K
R249 2.2K
R250 1M-F
C256 J-.1
C257 J-560 SL
R265 47K-F
L209 100μH
L211 100μH
C248 16V 47μ
L210 100μH
R242 1K-F
R243 1K-F
C246 16V 10μ
LPF 3M
LPF201
IC214 BX6386
C247 16V 10μ
L700 100μH
R701 1K
R702 1K-F
Q701
C733 16V 47μ
C732 .01
R700 100
Q700
R769 1K-F
LPF700
R703 220
R705 1K-F
BPF700
C752 16V 10μ
R704 1K-F
L702 100μ
L703 100μ
L716 100μ
C707 .1
C708 .1
C706 16V 47μ
C761 16V 47μ
R716 2.2K
R714 2.2K
J13
IC702 MN3B15
1132STEP CCD
CLAMP
CLOCK DRIVER
BIAS
C709 47
C710 1000
C711 47
R713 220
Q704
R715 470-F
R768 1.5K
R770 680-F
LPF701
R717 33K
R719 2.7K
C718 16V 10μ
R718 27K
Q705
L704 100μH
L715 100μH
R725 4.7K-F
J720 J-4700 SL
R726 1K-F
C721 .047μ
IC704 MN3109S
VCO
PC
4fs
OUT-PUT
C722 16V 47μ
C723 .1
C724 .01
R728 220
SECAM-C
4FSC
VIDEO-IN
SEPA-C
Y+C
DCF-C-OUT
DCF-Y-OUT
Y-OUT
REC-5
DOP
SW-5
SS-V-SYNC
HQ-V-SYNC
SP-SIG
C-ROT
D-N
EE
V-ENVE
NTSC-PB
S-VHS
C-SYNC
S-C
PB
D-FF
SW-9
SW-12
HA-SW
PB-5
S-SW
S-IN
EDIT
IP-OFF
IP-PIX
PIX-CONT
E-240
TO/FROM Y
TP71 PLAY
0.5Vp-p(H)
TP71 REC
0.6Vp-p(H)

(INT)

| SYMBOL NO. MODELS | C225 | C242 |
|---|---|---|
| HS-B82 | ○ | × |
| HS-E82,E82(A)(Y)(IR)(NZ) | ○ | × |
| HS-E82(G) | × | ○ |



5
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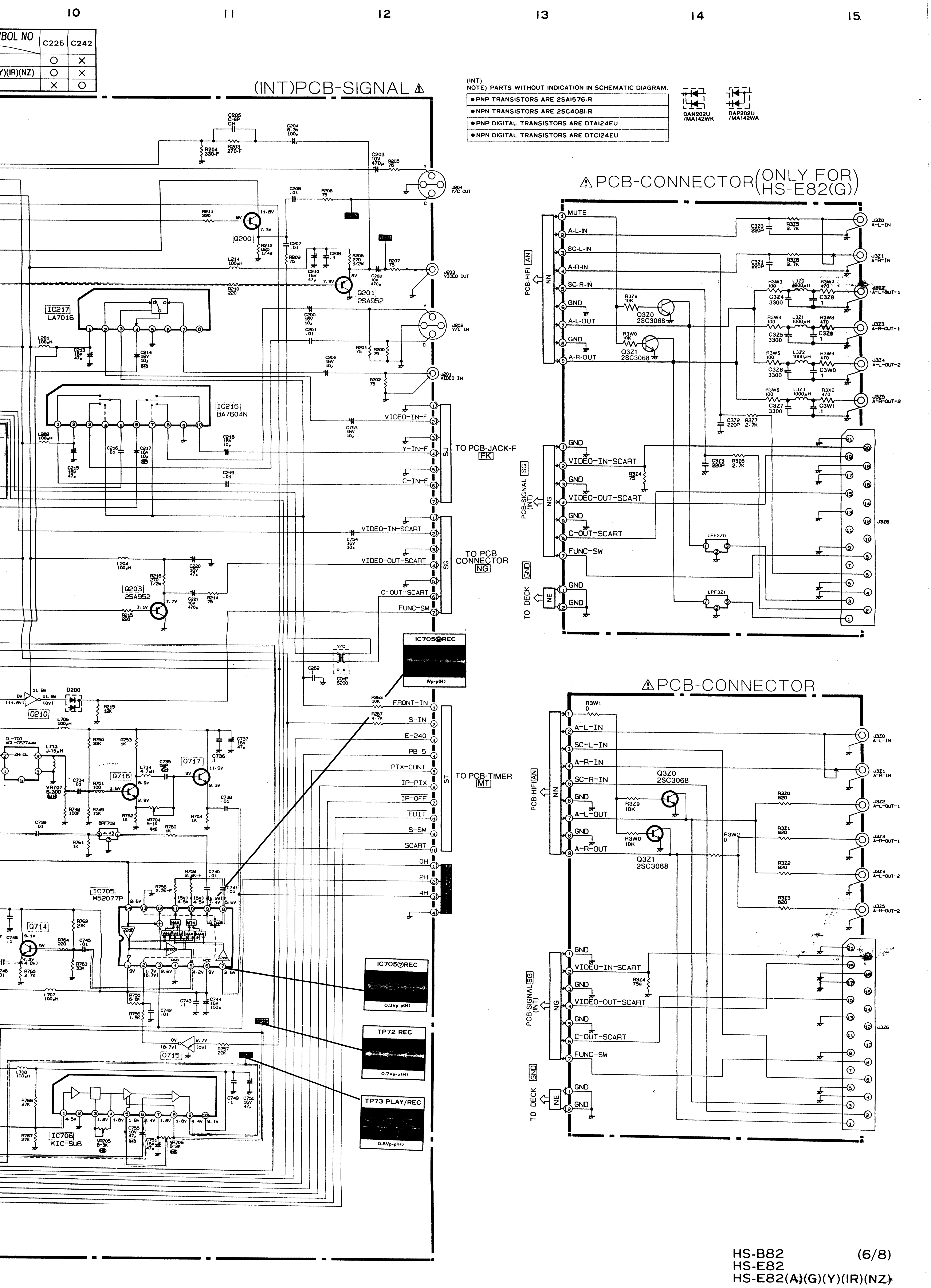
9
10
IC210 PLAY
2Vp-p(H)
TO PCB-CONTROL CE (MC)
SE
BB
MESECAM
ANT-V
BST-5
PB
D-EXT
AFR
HA-SW
S-LED
BLNK
TO PCB-POWER PB
SB
SW-5
SW-9
SW-12
V-OUT PLAY
1Vp-p(H)
TO RF CONVERTER RZ
SZ
V-OUT
A-OUT
ANT-V
BST-5
TO PCB-HIFI AC
SC
CONV-AUDIO
TU-VIDEO
TU-VIDEO
1.2Vp-p(H)
C264 .01
SW-5
SW-12
C242 16V 10μ
IC201 NJM2235S
CLAMP
R231 5.6K
R232 270-F
R233 4.3K-F
R234 270K
C237 16V 47μ
L206 100μH
IC200 BA7021
IC217 LA7016
L203 100μH
L201 100μH
C223 16V 10μ
C222 16V 47μ
C213 16V 47μ
C214 16V 10μ
Q205
5V
0V
R266 270K
R213 10K
Q204
IC203 LA7016
L207 100μH
C227 16V 47μ
C228 10V 10μ NP
C229 16V 10μ
L208 100μH
IC202 BA7604N
R217 1K
Q202
R218 220
C225 16V 10μ
C224 .01
C226 6.3V 47μ
L205 100μH
L202 100μH
C216 .01
C217 16V 10μ
C215 16V 47μ
R227 5.6K-F
R228 2.2K-F
Q208
R229 33K-F
C230 16V 47μ
C231 .01
R220 22K-F
R223 270 1/2W
Q207
C236 16V 10μ
R230 12K-F
R222 150
R224 5.1K-F
C233 16V 47μ
C235 J-15 SL
R225 2.7K-F
R226 F-2.7K
C232 16V 10μ
R221 27K-F
Q206 2SA952
L204 100μH
R216 270 1/2W
Q203 2SA952
R215 220
R256 F-6.5K
R255 F-3.3K
C263 MM .01
C259 J-4700 MP
R253 4.7K
C261 50V 1μ
R257 F-12K
C260 MM .01
R254 15K-F
CLAMP
V-SYNC SEPA
APC
SYNC SEPA
IC210 NJM2217L
C252 J-.022 TF
C253 50V 1μ
R246 47K-F
C255 J-1200 MP
C256 J-1 TF
R251 560-F
R245 4.7K-F
R247 13K-F
R248 10K
R250 1M-F
C257 J-560 SL
R252 2.2K-F
VR200 B-3K
C254 6.3V 330μ
R249 2.2K
R285 47K-F
C258 1000-K
L209 100μH
Q216
C246 16V 47μ
L210 100μH
R243 1K-F
C245 16V 10μ
LPF201
IC214 BX6386
C247 16V 10μ
Q209
Q210
D200
R219 12K
L706 100μH
L700 100μH
R701 1K
R702 1K-F
Q701
C733 16V 47μ
C732 .01
L701 100μH
R789 1K-F
LPF700
R703 220
R705 1K-F
BPF700
C700 .01
IC700 BX6386
R706 1K-F
C752 50V 1μ
R704 1K-F
R707 33K
R709 1K
L709 J-4.7μH
C702 J-56P CH
Q703
C703 16V 47μ
C704 .01
C701 .01
Q702
R708 15K
R710 1K
R711 220-F
C705 .01
R712 1K
R747 390F
DL-700 ADL-CE2744M
L713 J-15μH
R750 33K
R753 1K
L712 J-15μH
VR707 B-300 MB
C734 .01
R751 100
Q716
L714 4.7μH
C735 56P
Q71
R748 100F
R749 15K
R752 1K
VR704 B-1K
BPF702
R760 1K
C739 .01
R761 1K
L702 100μ
L703 100μ
L716 100μ
C707
C708
C706 16V 47μ
C751 16V 47μ
R716 2.2K
R714 2.2K
R717 33K
R719 2.7K
Q705
C719 35V 4.7μ
C718 16V 10μ
R718 27K
C715
C717
C716 16V 47μ
C760 16V 47μ
R723 2.2K
R721 2.2K
R724 2.2K-F
L705 100μH
R733 1K
R736 1.2K-F
C728 .01
C727 16V 47μ
R739 3.3K
IC705 M52077P
IC702 MN3815
1132STEP CCD
CLOCK DRIVER
BIAS
CLAMP
IC703 MN3815
R768 1.5K
R770 680-F
LPF701
R715 470-F
R713 220
C709 .47
C710 1000
C711 .47
Q704
C712 .47
C713 1000
C714 .47
R720 220
Q706
R722 470-F
LPF702
Q707
C725 16V 10μ
L711 J-47μH
Q709
Q708
R729 5.6K
R730 15K
R731 270
VR702 B-1K MB
R732 270
C726 16V 47μ
R735 15K
C762 J-47P CH
L717 J-56μH
R774 1.8K
Q710
R737 470-F
DF700
R738 470-F
R734 2.7K
Q714
C747 16V 47μ
C748 .1
R762 27K
R764 220
C745 .01
R763 33K
R765 2.7K
C746 .01
L707 100μH
R755 6.8K
R756 1.5K
C742 .01
C743
IC710 KIC-SYNC-P
CLAMP
Vcc5V
Vcc12V
C770 6.3V 100μ
C771 50V .33
R775 1.8K
R740 1K-F
BPF701
C729 .01
R743 33K
R741 1K-F
R742 15K
Q712
R746 1K
VR703 B-1K
L710 J-4.7μH
C730 J-56P CH
R745 1K
Q713
C731 .01
R744 1K
Q715
D700
D701
R771 1.2K
R772 12K
R773 12K
Q718
L708 100μH
R766 27K
R767 27K
IC706 KIC-SUB
VR705 B-3K
C755 10V 47μ
C756 16V 47μ
VR706 B-2K
R725 4.7K-F
R726 1K-F
R727 1K
C721 .047μ TF
VCO
PC
4fs
OUT-PUT
IC704 MN3109S
R728 220
Q711
C722 16V 47μ
C723 .1
C724 .01
TP71 PLAY
0.5Vp-p(H)
TP71 REC
0.6Vp-p(H)

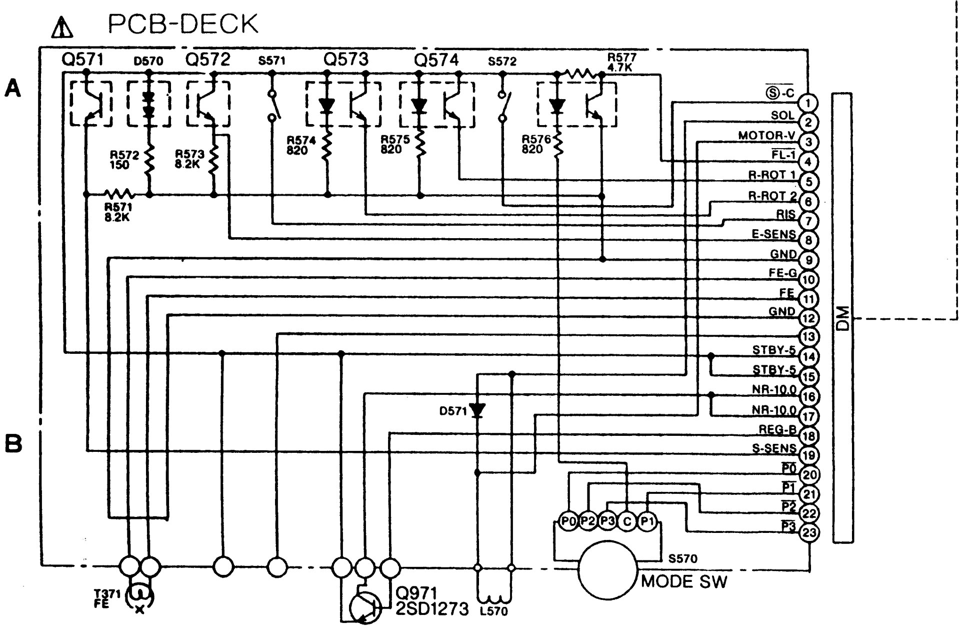
| BOL NO. | C225 | C242 |
|---|---|---|
|  | ○ | × |
| Y)(IR)(NZ) | ○ | × |
|  | × | ○ |

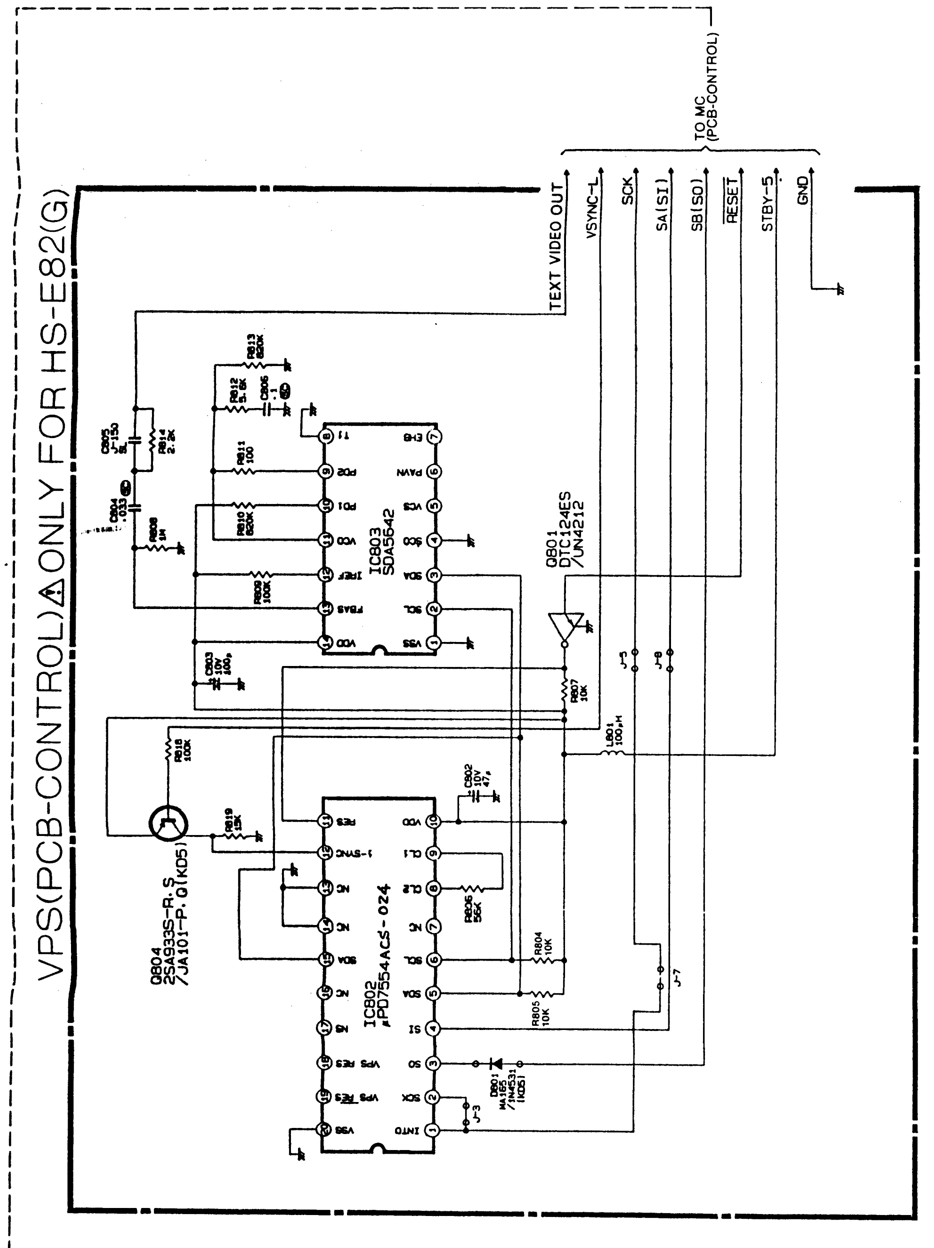
(INT)
NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

- ●PNP TRANSISTORS ARE 2SA1576-R
- ●NPN TRANSISTORS ARE 2SC4081-R
- ●PNP DIGITAL TRANSISTORS ARE DTA124EU
- ●NPN DIGITAL TRANSISTORS ARE DTC124EU


10
11
12
13
14
15
(INT)PCB-SIGNAL ⚠
DAN202U /MA142WK
DAP202U /MA142WA
⚠PCB-CONNECTOR(ONLY FOR HS-E82(G))
⚠PCB-CONNECTOR
IC217 LA7016
IC216 BA7604N
IC705 M52077P
IC706 KIC-SUB
Q200
Q201 2SA952
Q203 2SA952
Q210
Q714
Q715
Q716
Q717
Q3Z0 2SC3068
Q3Z1 2SC3068
D200
J204 Y/C OUT
J203 VIDEO OUT
J202 Y/C IN
J201 VIDEO IN
J3Z0 A-L-IN
J3Z1 A-R-IN
J3Z2 A-L-OUT-1
J3Z3 A-R-OUT-1
J3Z4 A-L-OUT-2
J3Z5 A-R-OUT-2
J3Z6
VIDEO-IN-F
Y-IN-F
C-IN-F
TO PCB-JACK-F FK
VIDEO-IN-SCART
VIDEO-OUT-SCART
C-OUT-SCART
FUNC-SW
TO PCB CONNECTOR NG
FRONT-IN
S-IN
E-240
PB-5
PIX-CONT
IP-PIX
IP-OFF
EDIT
S-SW
SCART
TO PCB-TIMER MT
0H
2H
4H
MUTE
A-L-IN
SC-L-IN
A-R-IN
SC-R-IN
GND
A-L-OUT
A-R-OUT
PCB-HIFI AN
PCB-SIGNAL (INT) SG
TO DECK GND
NN
NG
NE
SJ
SG
ST
LPF3Z0
LPF3Z1
COMP S200
DL-700 ADL-CE2744H
BPF702
IC705⑨REC
1Vp-p(H)
IC705⑦REC
0.3Vp-p(H)
TP72 REC
0.7Vp-p(H)
TP73 PLAY/REC
0.8Vp-p(H)

## ⚠PCB-CONTROL (MC)


⚠ PCB-DECK
Q571
D570
Q572
S571
Q573
Q574
S572
R577 4.7K
R572 150
R573 8.2K
R574 820
R575 820
R576 820
R571 8.2K
S-C
SOL
MOTOR-V
FL-1
R-ROT 1
R-ROT 2
RIS
E-SENS
GND
FE-G
FE
GND
STBY-5
STBY-5
NR-10.0
NR-10.0
REG-B
S-SENS
P0
P1
P2
P3
D571
DM
T371 FE
Q971 2SD1273
L570
S570
MODE SW
A
B


VPS(PCB-CONTROL)⚠ONLY FOR HS-E82(G)
TO MC (PCB-CONTROL)
TEXT VIDEO OUT
VSYNC-L
SCK
SA(SI)
SB(SO)
RESET
STBY-5
GND
IC803 SDA5642
IC802 μPD7554ACS-024
Q801 DTC124ES /UN4212
Q804 2SA933S-R.S /JA101-P.Q(KD5)
D801 MA165 /1N4531 (KD5)
L801 100μH
J-3
J-5
J-6
J-7
C
D
E
F
G

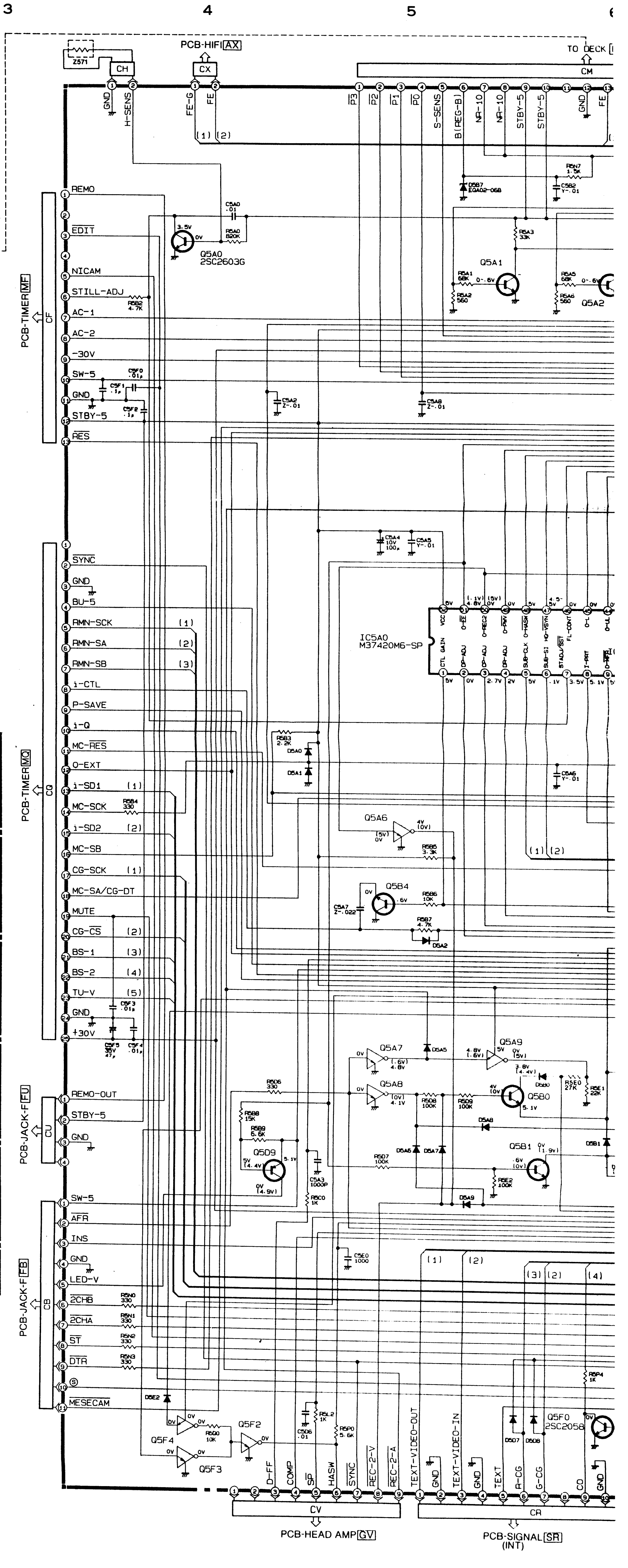
MC

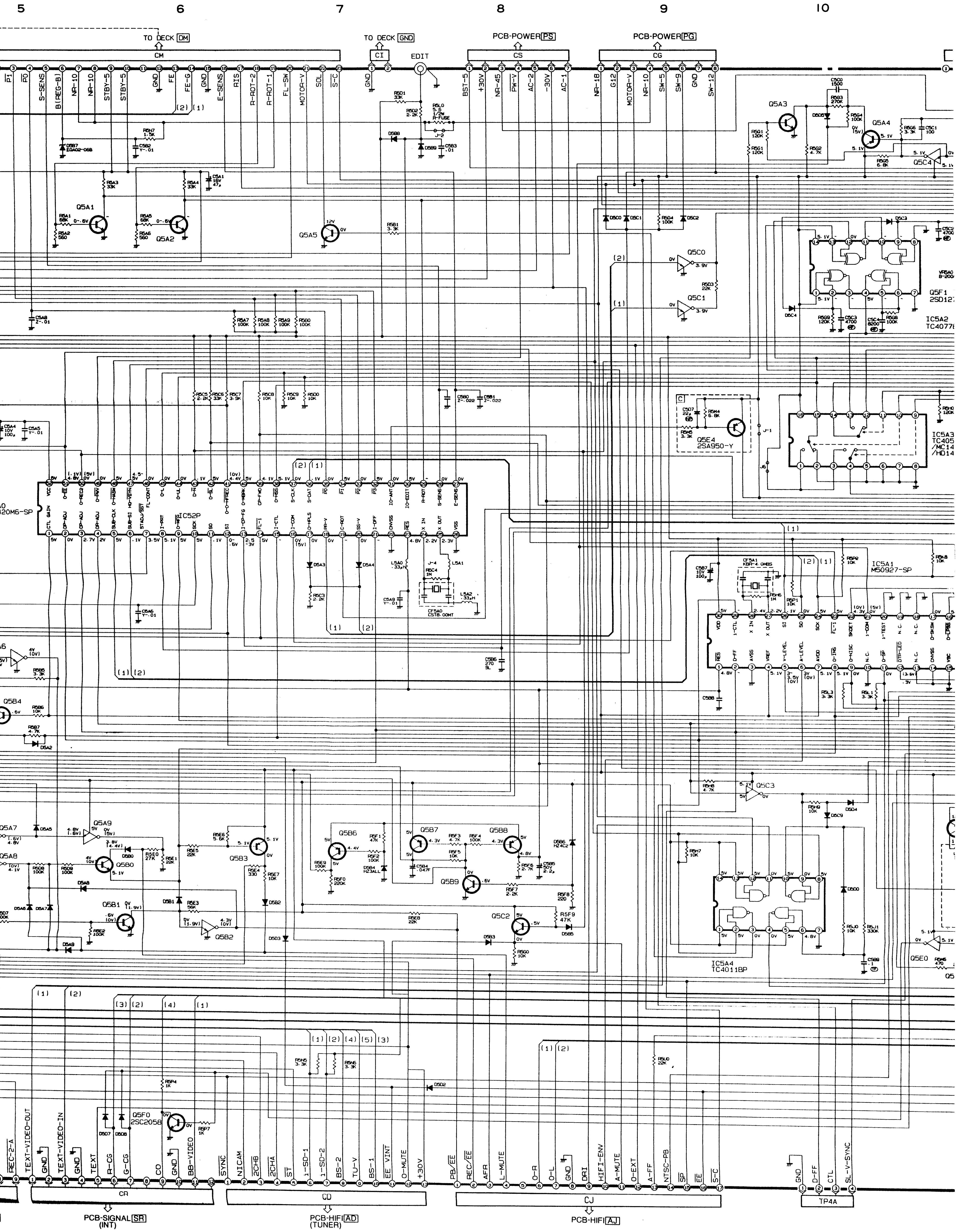
| SYMBOL NO. / MODELS | A AREA | B AREA | C AREA | R5L0 | J-2 | J-1 | C5F0 ∫ C5F5 |
|---|---|---|---|---|---|---|---|
| HS-E82.E82(Y)(IR) | × | × | × | × | ○ | ○ | × |
| HS-B82 | × | × | × | ○ | × | ○ | × |
| HS-E82(G) | ○ | ○ | × | × | ○ | ○ | ○ |
| HS-E82(A)/(NZ) | × | × | ○ | × | ○ | × | × |

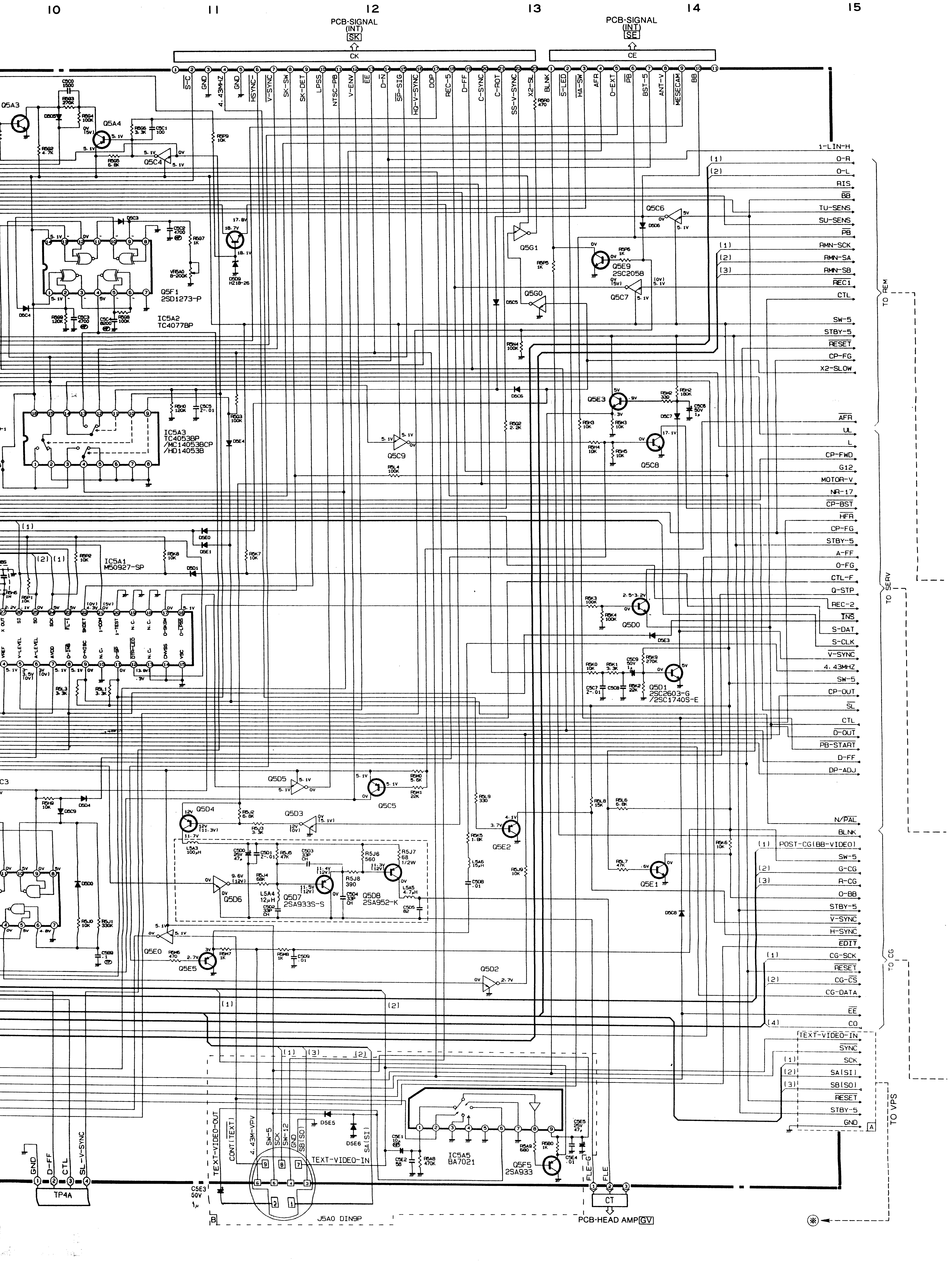
NOTE) PARTS WITHOUT INDICATION IN SCHEMATIC DIAGRAM.

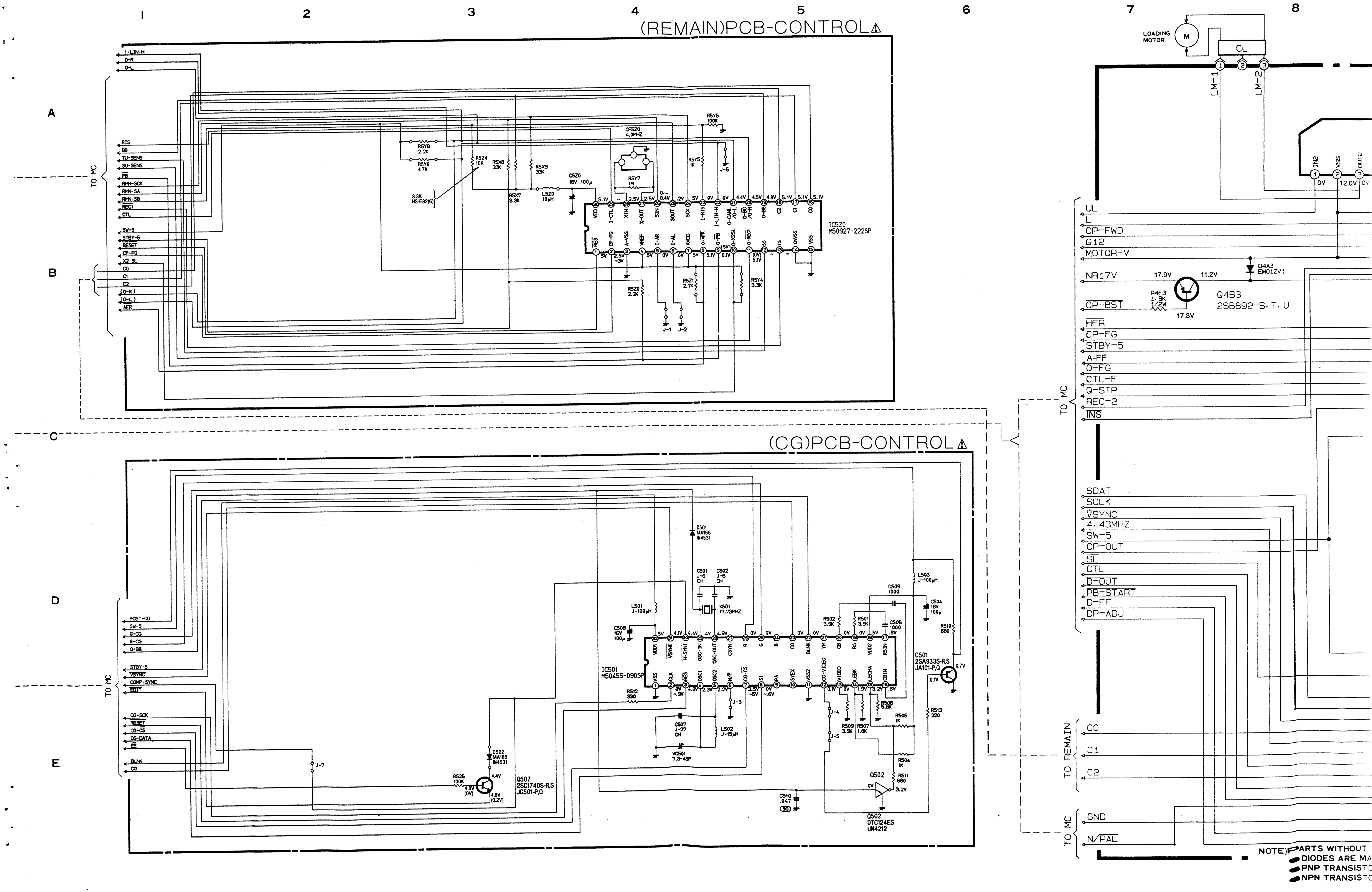
- DIODES ARE MA165
- PNP TRANSISTORS ARE 2SA933S-R.S
- NPN TRANSISTORS ARE 2SC1740S-R.S
- PNP DIGITAL TRANSISTORS DTA124ES/UN4112
- NPN DIGITAL TRANSISTORS ARE DTC124ES/UN4212

H ※

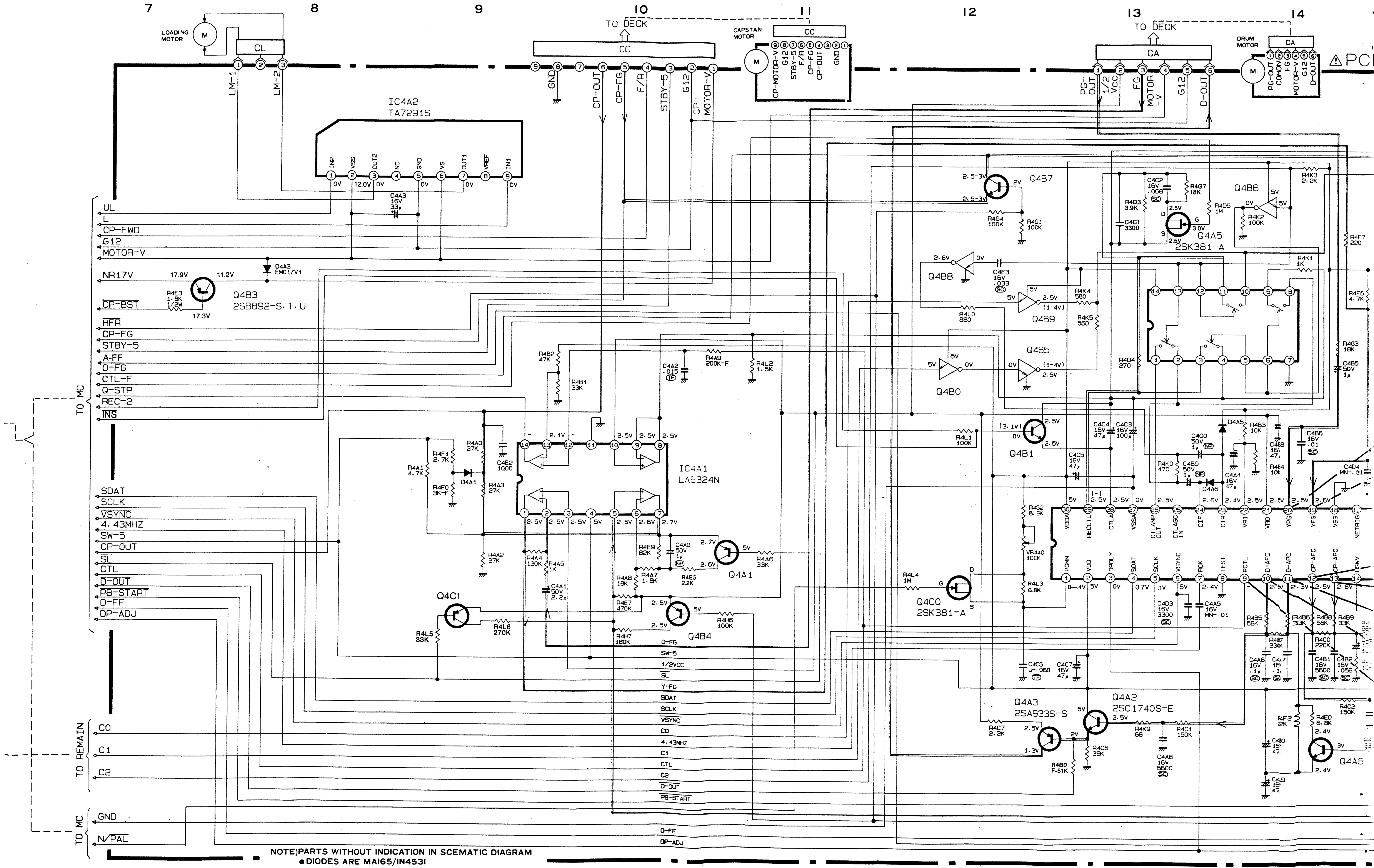

1
2
3
4
5
PCB-HIFI AX
CH
CX
TO DECK
CM
GND
H-SENS
FE-G
FE
P3
P2
P1
P0
S-SENS
B(REG-B)
NR-10
NR-10
STBY-5
STBY-5
GND
FE
PCB-TIMER MF
CF
REMO
EDIT
NICAM
STILL-ADJ
AC-1
AC-2
-30V
SW-5
GND
STBY-5
RES
Q5A0 2SC2603G
Q5A1
Q5A2
D5B7 EQA02-068
PCB-TIMER MQ
CQ
SYNC
GND
BU-5
RMN-SCK
RMN-SA
RMN-SB
i-CTL
P-SAVE
i-Q
MC-RES
O-EXT
i-SD1
MC-SCK
i-SD2
MC-SB
CG-SCK
MC-SA/CG-DT
MUTE
CG-CS
BS-1
BS-2
TU-V
GND
+30V
IC5A0 M37420M6-SP
Q5A6
Q5B4
Q5A7
Q5A8
Q5A9
Q580
Q5B1
Q5D9
PCB-JACK-F FU
CU
REMO-OUT
STBY-5
GND
PCB-JACK-F FB
CB
SW-5
AFR
INS
GND
LED-V
2CHB
2CHA
ST
DTR
MESECAM
Q5F4
Q5F2
Q5F3
Q5F0 2SC2058
D-FF
COMP
SP
HASW
SYNC
REC-2-V
REC-2-A
TEXT-VIDEO-OUT
GND
TEXT-VIDEO-IN
GND
TEXT
R-CG
G-CG
CO
GND
CV
CR
PCB-HEAD AMP GV
PCB-SIGNAL SR (INT)


5
6
7
8
9
10
TO DECK DM
CM
TO DECK GND
CI
EDIT
PCB-POWER PS
CS
PCB-POWER PG
CG
P1
P0
S-SENS
B(REG-B)
NR-10
NR-10
STBY-5
STBY-5
GND
FE
FE-G
GND
E-SENS
RIS
R-ROT-2
R-ROT-1
FL-SW
MOTOR-V
SOL
S-C
GND
BST-5
+30V
NR-45
PW-V
AC-2
-30V
AC-1
NR-18
G12
MOTOR-V
NR-10
SW-5
SW-9
GND
SW-12
Q5A1
Q5A2
Q5A3
Q5A4
Q5A5
Q5C0
Q5C1
Q5C4
Q5F1
2SD127
IC5A2
TC4077B
IC5A3
TC405
/MC14
/HD14
Q5E4
2SA950-Y
IC52P
20M6-SP
IC5A1
M50927-SP
CF5A1
KBR-4.0MBS
CF5A0
CSTB.00MT
Q5B4
Q5A7
Q5A8
Q5A9
Q5B0
Q5B1
Q5B2
Q5B3
Q5B6
Q5B7
Q5B8
Q5B9
Q5C2
Q5C3
Q5E0
IC5A4
TC4011BP
Q5F0
2SC2058
REC-2-A
TEXT-VIDEO-OUT
GND
TEXT-VIDEO-IN
GND
TEXT
R-CG
G-CG
CO
GND
BB-VIDEO
CR
PCB-SIGNAL SR
(INT)
SYNC
NICAM
2CHB
2CHA
ST
1-SD-1
1-SD-2
BS-2
TU-V
BS-1
EE VINT
O-MUTE
+30V
CD
PCB-HIFI AD
(TUNER)
PB/EE
REC/EE
AFR
L-MUTE
O-R
O-L
GND
DRI
HIFI-ENV
A-MUTE
O-EXT
A-FF
NTSC-PB
SP
EE
S-C
CJ
PCB-HIFI AJ
GND
D-FF
CTL
SL-V-SYNC
TP4A

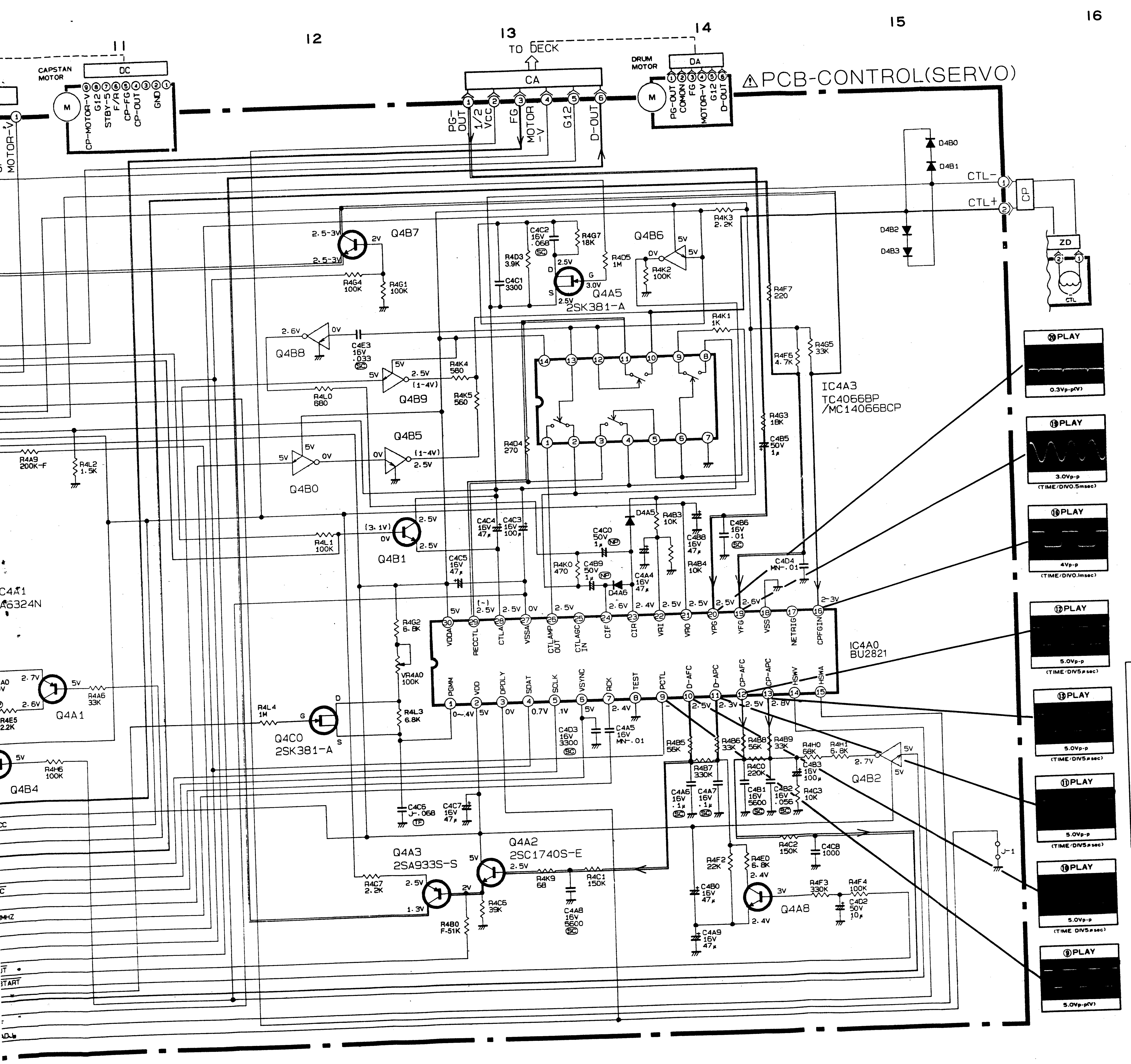

10
11
12
13
14
15
PCB-SIGNAL (INT) SK
CK
PCB-SIGNAL (INT) SE
CE
S-C
GND
4.43MHZ
GND
HSYNC
V-SYNC
SK-SW
SK-DET
LPSS
NTSC-PB
V-ENV
EE
D-N
SP-SIG
HQ-V-SYNC
DOP
REC-5
D-FF
C-SYNC
C-ROT
SS-V-SYNC
X2-SL
BLNK
S-LED
HA-SW
AFR
D-EXT
PB
BST-5
ANT-V
MESECAM
BB
Q5A3
Q5A4
Q5C4
Q5C6
Q5G1
Q5E9
2SC2058
Q5C7
Q5G0
Q5F1
2SD1273-P
IC5A2
TC4077BP
IC5A3
TC4053BP
/MC14053BCP
/HD14053B
Q5E3
Q5C8
Q5C9
IC5A1
M50927-SP
Q5D0
Q5D1
2SC2603-G
/2SC1740S-E
Q5D5
Q5C5
Q5D4
Q5D3
Q5E2
Q5D6
Q5D7
2SA933S-S
Q5D8
2SA952-K
Q5E1
Q5E0
Q5E5
Q5D2
IC5A5
BA7021
Q5F5
2SA933
1-LIN-H
O-R
O-L
RIS
BB
TU-SENS
SU-SENS
PB
RMN-SCK
RMN-SA
RMN-SB
REC1
CTL
TO REM
SW-5
STBY-5
RESET
CP-FG
X2-SLOW
AFR
UL
L
CP-FWD
G12
MOTOR-V
NR-17
CP-BST
HFR
CP-FG
STBY-5
A-FF
O-FG
CTL-F
Q-STP
REC-2
INS
S-DAT
S-CLK
V-SYNC
4.43MHZ
SW-5
CP-OUT
SL
TO SERV
CTL
D-OUT
PB-START
D-FF
DP-ADJ
N/PAL
BLNK
POST-CG(BB-VIDEO)
SW-5
G-CG
R-CG
O-BB
STBY-5
V-SYNC
H-SYNC
EDIT
CG-SCK
RESET
CG-CS
CG-DATA
TO CG
EE
CO
TEXT-VIDEO-IN
SYNC
SCK
SA(SI)
SB(SO)
RESET
STBY-5
GND
A
TO VPS
GND
D-FF
CTL
SL-V-SYNC
TP4A
TEXT-VIDEO-OUT
CONT(TEXT)
4.43M-VPV
SW-5
SCK
SW-12
GND
SB(SO)
SA(SI)
TEXT-VIDEO-IN
D5E5
D5E6
J5A0 DIN9P
B
C5E3 50V 1μ
FLE-G
FLE
CT
PCB-HEAD AMP GV
※


1
2
3
4
5
6
7
8
A
B
C
D
E
(REMAIN)PCB-CONTROL⚠
I-LIN-H
O-R
O-L
TO MC
RTS
BB
TU-SENS
SU-SENS
PB
RMN-SCK
RMN-SA
RMN-SB
REC1
CTL
SW-5
STBY-5
RESET
CP-FG
X2 SL
C0
C1
C2
(O-R)
(O-L)
AFR
R5Y8 2.2K
R5Y9 4.7K
R5Z4 10K
R5X8 33K
R5X9 33K
R5X7 3.3K
3.3K HS-E82(G)
L5Z0 10μH
C5Z0 16V 100μ
CF5Z0 4.0MHZ
R5Y7 1M
R5Y6 100K
R5Y5 1K
J-5
IC5Z0 M50927-222SP
VDD
I-CTL
XIN
X-OUT
SIN
SOUT
SCK
I-RIS
I-LIN-H
O-CTL
O-FG
O-BB
C2
C1
C0
RES
CP-FG
A-VSS
VREF
I-AR
I-AL
AVDD
O-AR
O-PB
O-X2SL
O-REC1
VSS
R5Z0 2.2K
R5Z1 2.7K
R5Y4 3.3K
J-1
J-2
(CG)PCB-CONTROL⚠
POST-CG
SW-5
G-CG
R-CG
O-BB
STBY-5
VSYNC
COMP-SYNC
EDIT
CG-SCK
RESET
CG-CS
CG-DATA
EE
BLNK
C0
TO MC
D501 MA165 1N4531
C501 J-6 CH
C502 J-6 CH
X501 17.73MHZ
L501 J-100μH
C508 16V 100μ
L503 J-100μH
C509 1000
C504 16V 100μ
R502 3.9K
R501 3.9K
C506 1000
R510 680
IC501 M50455-090SP
VDD1
VSYNC
H-SYNC
OSC-IN
OSC-OUT
CSYN
R
G
B
CO
BLNK
YM
CB
RS
VDD2
RSIN
VSS
CLK
RES
OSC1
OSC2
N/P
CG-CS
SI
PA
SYEX
VSS2
CG-VIDEO
VIDEO
LEBK
ECHA
CBIN
R512 330
C507 J-27 CH
VC501 7.3-45P
L502 J-15μH
J-3
J-4
J-5
R509 3.9K
R507 1.8K
R506 5.6K
R505 1K
R513 220
R504 1K
R511 680
Q501 2SA933S-R,S JA101-P,Q
Q502
Q502 DTC124ES UN4212
C510 .047
J-7
D502 MA165 1N4531
R526 100K
Q507 2SC1740S-R,S JC501-P,Q
LOADING MOTOR
M
CL
LM-1
LM-2
IN2
VSS
OUT2
0V
12.0V
UL
L
CP-FWD
G12
MOTOR-V
D4A3 EM01ZV1
NR17V
17.9V
11.2V
R4E3 1.8K 1/2W
Q4B3 2SB892-S, T, U
CP-BST
17.3V
HFR
CP-FG
STBY-5
A-FF
O-FG
CTL-F
Q-STP
REC-2
INS
TO MC
SDAT
SCLK
VSYNC
4.43MHZ
SW-5
CP-OUT
SL
CTL
D-OUT
PB-START
D-FF
DP-ADJ
TO REMAIN
C0
C1
C2
TO MC
GND
N/PAL

NOTE) PARTS WITHOUT
DIODES ARE MA
PNP TRANSISTO
NPN TRANSISTO

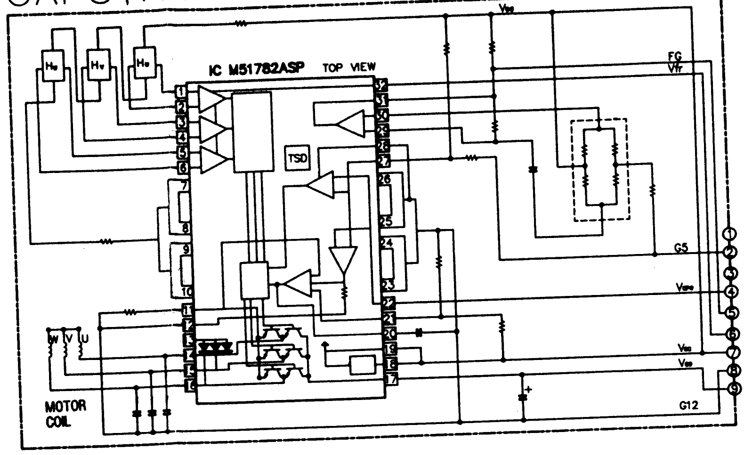

7
8
9
10
11
12
13
14
LOADING MOTOR
M
CL
LM-1
LM-2
TO DECK
CC
GND
CP-OUT
CP-FG
F/R
STBY-5
G12
CP-MOTOR-V
CAPSTAN MOTOR
DC
CP-MOTOR-V
G12
STBY-5
F/R
CP-FG
CP-OUT
GND
TO DECK
CA
PG-OUT
1/2 VCC
FG
MOTOR-V
G12
D-OUT
DRUM MOTOR
DA
PG-OUT
COMON
FG
MOTOR-V
G12
D-OUT
⚠PC
IC4A2
TA7291S
IN2
VSS
OUT2
NC
GND
VS
OUT1
VREF
IN1
0V
12.0V
C4A3 16V 33μ
UL
L
CP-FWD
G12
MOTOR-V
D4A3 EM01ZV1
NR17V
17.9V
11.2V
R4E3 1.8K 1/2W
Q4B3 2SB892-S, T, U
17.3V
CP-BST
HFR
CP-FG
STBY-5
A-FF
O-FG
CTL-F
Q-STP
REC-2
INS
TO MC
SDAT
SCLK
VSYNC
4.43MHZ
SW-5
CP-OUT
SL
CTL
D-OUT
PB-START
D-FF
DP-ADJ
TO REMAIN
C0
C1
C2
TO MC
GND
N/PAL
IC4A1
LA6324N
R4B2 47K
R4B1 33K
C4A2 .015
R4A9 200K-F
R4L2 1.5K
R4A0 27K
C4E2 1000
R4F1 2.7K
R4A1 4.7K
D4A1
R4F0 3K-F
R4A3 27K
R4A2 27K
R4A4 120K
R4A5 1K
C4A1 50V 2.2μ
R4E9 82K
C4A0 50V 1μ
R4A8 18K
R4A7 1.8K
R4E5 2.2K
Q4A1
R4A6 33K
R4E7 470K
R4H7 180K
Q4B4
R4H6 100K
Q4C1
R4L5 33K
R4L6 270K
D-FG
SW-5
1/2VCC
SL
Y-FG
SDAT
SCLK
VSYNC
C0
4.43MHZ
C1
CTL
C2
D-OUT
PB-START
D-FF
DP-ADJ
Q4B7
R4G4 100K
R4G1 100K
Q4B8
C4E3 16V .033
R4L0 680
Q4B9
R4K4 580
R4K5 560
Q4B0
Q4B5
R4L1 100K
Q4B1
R4G2 6.8K
VR4A0 10K
R4L3 6.8K
R4L4 1M
Q4C0 2SK381-A
C4C5 J-.068
C4C7 16V 47μ
Q4A3 2SA933S-S
Q4A2 2SC1740S-E
R4C7 2.2K
R4B0 F-51K
R4C5 39K
R4K9 68
R4C1 150K
C4A8 16V 5600
C4C2 16V .068
R4G7 18K
R4D3 3.9K
C4C1 3300
R4D5 1M
Q4A5 2SK381-A
Q4B6
R4K2 100K
R4K3 2.2K
R4K1 1K
R4F7 220
R4F6 4.7K
R4G3 18K
C4B5 50V 1μ
R4D4 270
C4C4 16V 47μ
C4C3 16V 100μ
C4C5 16V 47μ
D4A5
R4B3 10K
C4C0 50V 1μ
C4B8
R4E4 10K
C4B6 16V .01
R4K0 470
C4B9 50V 1μ
C4A4 16V 47μ
D4A6
C4D4
VDDA
RECCTL
CTLA
VSSA
CTLAMP OUT
CTLAGC IN
CIF
CIR
VRI
VRO
YPG
YFG
VSS
NETRIG
PGMM
VDD
DPOLY
SDAT
SCLK
VSYNC
RCK
TEST
PCTL
D-AFC
D-APC
CP-AFC
CP-APC
HSWV
C4D3 16V 3300
C4A5 16V MN-.01
R4B5 56K
R4B6 33K
R4B8 56K
R4B9 33K
R4E7 33K
C4A6 16V .1μ
C4A7 16V .1μ
R4C0 220K
C4B1 16V 5600
C4B2 16V .056
R4C2 150K
R4F2 2K
R4E0 6.8K
C4C0 16V
C4C9
Q4A8

NOTE)PARTS WITHOUT INDICATION IN SCEMATIC DIAGRAM
- DIODES ARE MA165/IN4531
- PNP TRANSISTORS ARE 2SA933S-R,S/JA101-P,Q
- NPN TRANSISTORS ARE 2SC1740S-R,S/JC501-P,Q

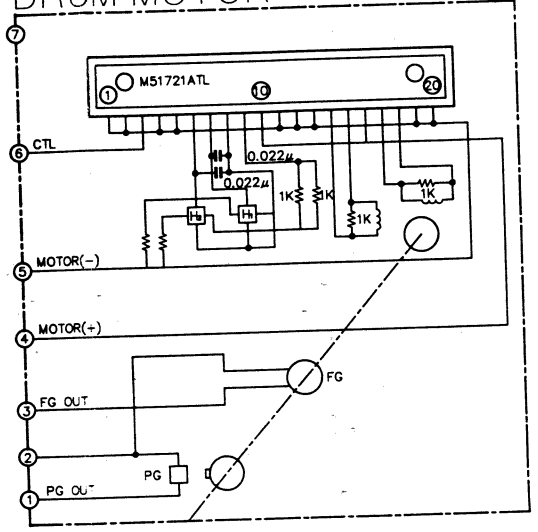

11
12
13
14
15
16
CAPSTAN MOTOR
DC
CP-MOTOR-V
G12
STBY-5
F/R
CP-FG
CP-OUT
GND
MOTOR-V
TO DECK
CA
PG-OUT
1/2 Vcc
FG
MOTOR -V
G12
D-OUT
DRUM MOTOR
DA
PG-OUT
COMON
FG
MOTOR-V
G12
D-OUT
⚠PCB-CONTROL(SERVO)
D4B0
D4B1
CTL-
CTL+
CP
D4B2
D4B3
ZD
CTL
Q4B7
2.5-3V
2V
R4G4 100K
R4G1 100K
C4C2 16V .068
R4G7 18K
R4D3 3.9K
C4C1 3300
Q4A5 2SK381-A
R4D5 1M
Q4B6
R4K2 100K
R4K3 2.2K
R4F7 220
R4K1 1K
Q4B8
C4E3 16V .033
Q4B9
R4K4 580
R4L0 680
R4K5 560
R4F6 4.7K
R4G5 33K
IC4A3 TC4066BP /MC14066BCP
R4G3 18K
C4B5 50V 1μ
Q4B5
R4A9 200K-F
R4L2 1.5K
Q4B0
R4D4 270
Q4B1
R4L1 100K
C4C4 16V 47μ
C4C3 16V 100μ
C4C5 16V 47μ
C4C0 50V 1μ
D4A5
R4B3 10K
C4B8 16V 47μ
C4B6 16V .01
R4K0 470
C4B9 50V 1μ
C4A4 16V 47μ
D4A6
R4B4 10K
C4D4 MN-.01
C4A1
A6324N
R4G2 6.8K
VR4A0 100K
R4L3 6.8K
IC4A0 BU2821
VDDA
RECCTL
CTLA
VSSA
CTLAMP OUT
CTLAGC IN
CIF
CIR
VRI
VRO
YPG
YFG
VSS
NETRIG
CPFGIN
PGMM
VDD
DPOLY
SDAT
SCLK
VSYNC
RCK
TEST
PCTL
D-AFC
D-APC
CP-AFC
CP-APC
HSWV
HSWA
Q4A1
R4A6 33K
R4E5 2.2K
R4L4 1M
Q4C0 2SK381-A
C4D3 16V 3300
C4A5 16V MN-.01
R4B5 56K
R4B6 33K
R4B8 56K
R4B9 33K
R4H0 68K
R4H1 6.8K
Q4B2
R4B7 330K
R4C0 220K
C4B3 16V 100μ
C4A6 16V .1μ
C4A7 16V .1μ
C4B1 16V 5600
C4B2 16V .056
R4C3 10K
Q4B4
R4H6 100K
C4C6 J-.068
C4C7 16V 47μ
Q4A3 2SA933S-S
Q4A2 2SC1740S-E
R4C7 2.2K
R4K9 68
R4C1 150K
R4C6 39K
R4B0 F-51K
C4A8 16V 5600
R4C2 150K
C4C8 1000
R4F2 22K
R4E0 6.8K
C4B0 16V 47μ
Q4A8
R4F3 330K
R4F4 100K
C4D2 50V 10μ
C4A9 16V 47μ
J-1
⑳PLAY 0.3Vp-p(V)
⑲PLAY 3.0Vp-p (TIME/DIV0.5msec)
⑯PLAY 4Vp-p (TIME/DIV0.1msec)
⑫PLAY 5.0Vp-p (TIME/DIV5μsec)
⑬PLAY 5.0Vp-p (TIME/DIV5μsec)
⑪PLAY 5.0Vp-p (TIME/DIV5μsec)
⑩PLAY 5.0Vp-p (TIME DIV5μsec)
⑨PLAY 5.0Vp-p(V)

17
18

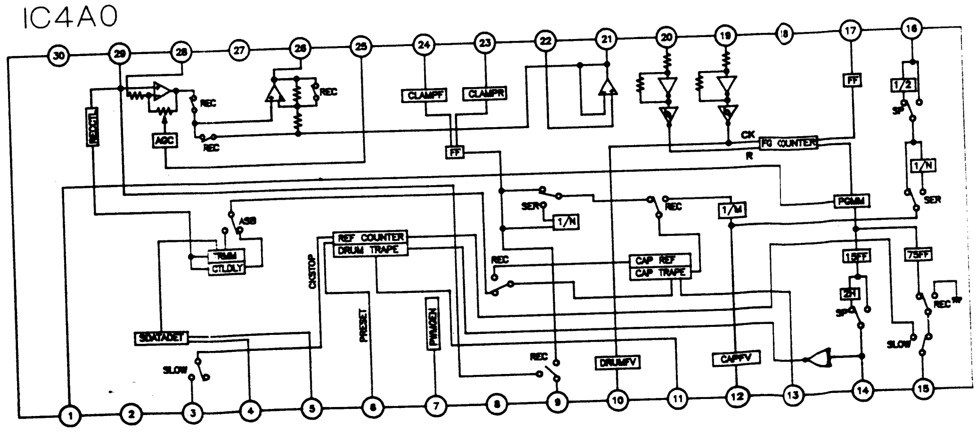
## CAPSTAN MOTOR

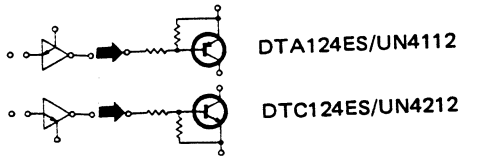

IC M51782ASP TOP VIEW
TSD
MOTOR COIL
FG
G5
G12

## DRUM MOTOR


M51721ATL
CTL
0.022μ
1K
MOTOR(-)
MOTOR(+)
FG OUT
FG
PG
PG OUT

## IC4A0


RECCTL
AGC
REC
CLAMPF
CLAMPR
FF
1/2
1/N
PGMM
FG COUNTER
REF COUNTER
DRUM TRAPE
CAP REF
CAP TRAPE
SDATADET
DRUMFV
CAPFV
SLOW
PRESET
SER

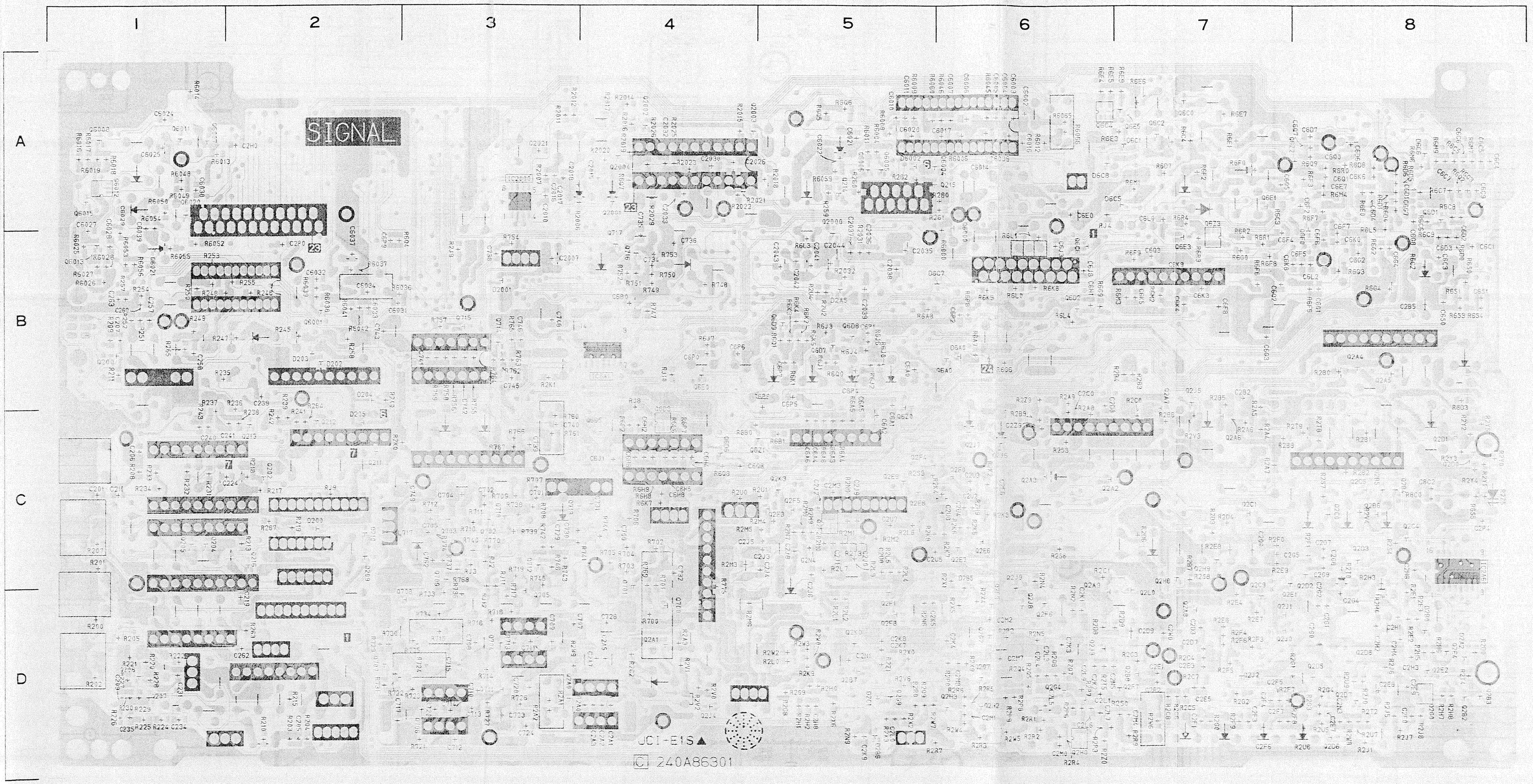

DTA124ES/UN4112
DTC124ES/UN4212

Drum Servo System

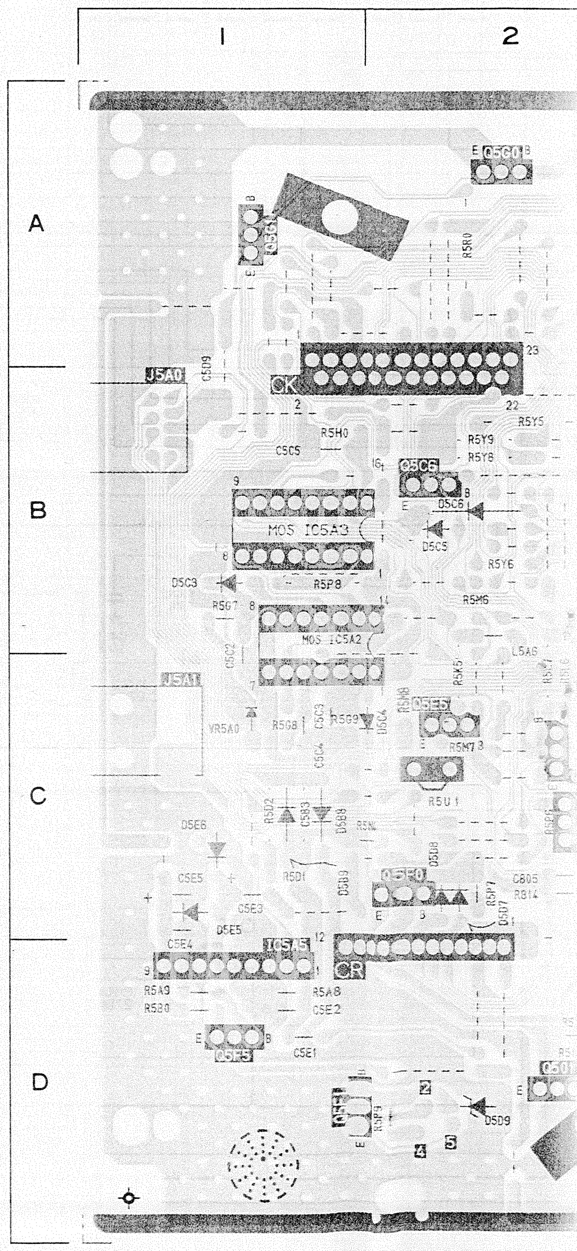
Capstan Servo System

HS-B82 (7/8)
HS-E82
HS-E82(A)(G)(Y)(IR)(NZ)

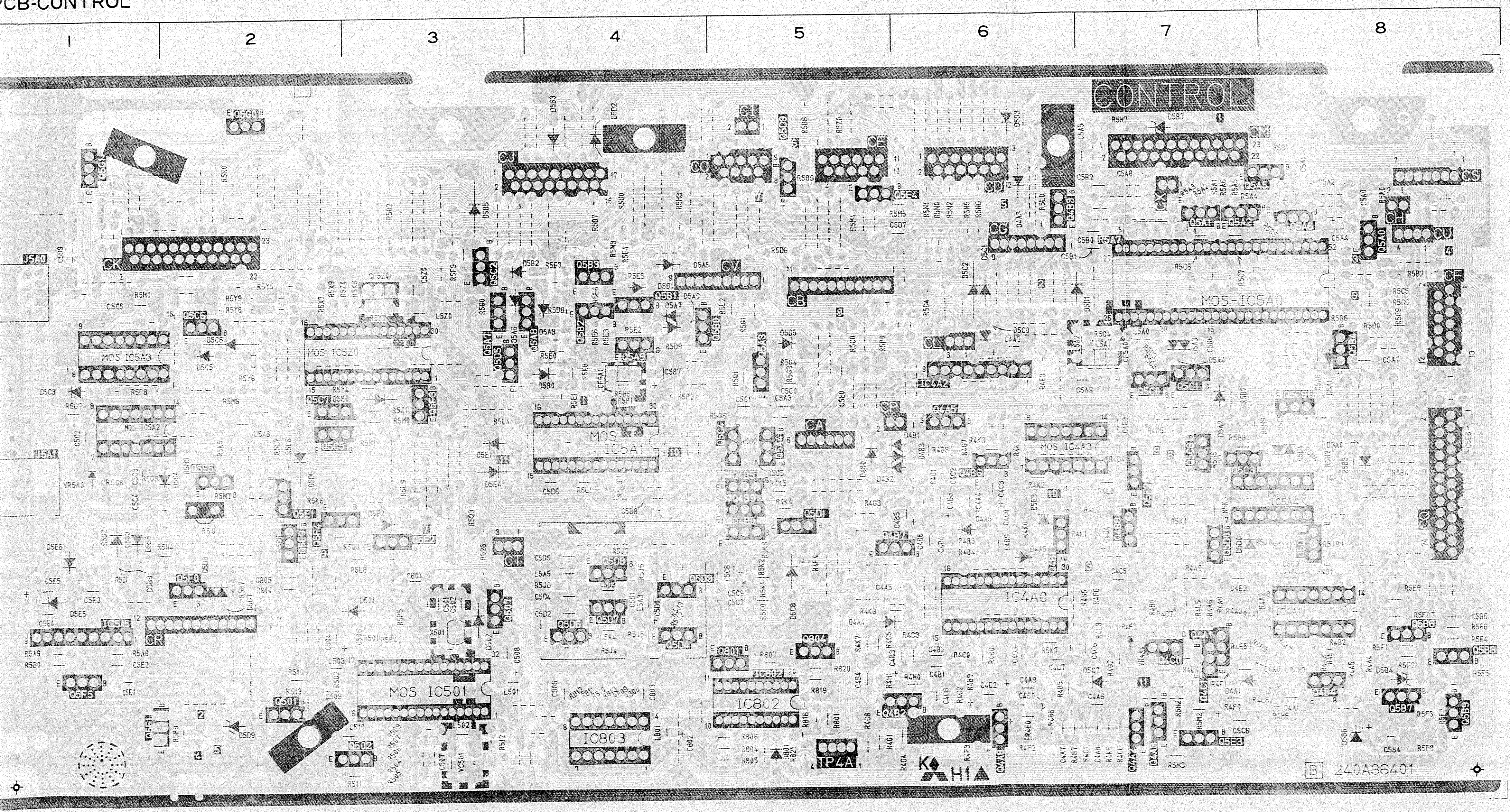
PCB-SIGNAL


1
2
3
4
5
6
7
8
A
B
C
D
SIGNAL
JC1-E1S▲
240A86301

PCB-CONTROL


1
2
A
B
C
D
J5A0
J5A1
CK
CR
MOS IC5A3
MOS IC5A2
Q5C6
Q5E5
Q5G0

PCB-CONTROL


1
2
3
4
5
6
7
8
CONTROL
MOS-IC5A0
MOS IC5A1
MOS IC5A3
MOS IC5A2
MOS IC5Z0
MOS IC4A3
IC5A4
IC4A0
IC4A1
MOS IC501
IC803
IC802
IC4A2
TP4A
H1
240A86401

| SYMBOL NO. | ADDRESS |
|---|---|
| D4A1 | D-7 |
| D4A3 | A-6 |
| D4A4 | D-5 |
| D4A5 | C-6 |
| D4A6 | C-6 |
| D4B0 | C-5 |
| D4B1 | C-6 |
| D4B2 | C-5 |
| D4B3 | C-6 |
| D501 | C-3 |
| D5A0 | C-8 |
| D5A1 | B-8 |
| D5A2 | C-7 |
| D5A3 | B-7 |
| D5A4 | B-7 |
| D5A5 | B-4 |
| D5A6 | B-3 |
| D5A7 | B-4 |
| D5A8 | B-4 |
| D5A9 | B-4 |
| D5B0 | B-4 |
| D5B1 | B-4 |
| D5B2 | B-4 |
| D5B3 | A-4 |
| D5B5 | A-3 |
| D5B4 | D-8 |
| D5B6 | D-8 |
| D5B7 | A-7 |
| D5B8 | C-1 |
| D5B9 | C-1 |
| D5C0 | B-6 |
| D5C1 | B-6 |
| D5C2 | B-6 |
| D5C3 | B-1 |
| D5C4 | C-2 |
| D5C5 | B-2 |
| D5C6 | B-2 |
| D5C7 | D-7 |
| D5C8 | D-5 |
| D5C9 | B-8 |
| D5D0 | C-7 |
| D5D1 | B-7 |
| D5D2 | A-4 |
| D5D3 | A-6 |
| D5A4 | C-8 |
| D5D5 | B-5 |
| D5D6 | C-2 |
| D5D7 | C-2 |
| D5D8 | C-2 |
| D5D9 | D-2 |
| D5E0 | B-2 |
| D5E1 | C-3 |
| D5E2 | C-3 |
| D5E3 | C-6 |
| D5E4 | C-3 |
| D5E5 | C-1 |
| D5E6 | C-1 |
| D801 | D-5 |
| | |
| | |

| SYMBOL NO. | ADDRESS |
|---|---|
| IC4A0 | C-6 |
| IC4A1 | D-8 |
| IC4A2 | B-6 |
| IC4A3 | C-6 |
| IC501 | D-3 |
| IC5A0 | B-7 |
| IC5A1 | C-4 |
| IC5A3 | B-1 |
| IC5A2 | B-1 |
| IC5A4 | C-8 |
| IC5A5 | D-1 |
| IC5Z0 | B-2 |
| IC802 | D-5 |
| IC803 | D-4 |
| | |
| | |
| Q4A1 | D-7 |
| Q4A2 | D-7 |
| Q4A3 | D-7 |
| Q4A5 | B-6 |
| Q4A8 | D-6 |
| Q4B0 | C-5 |
| Q4B1 | C-6 |
| Q4B2 | D-5 |
| Q4B3 | A-6 |
| Q4B4 | D-8 |
| Q4B5 | C-5 |
| Q4B6 | C-6 |
| Q4B7 | C-5 |
| Q4B8 | C-7 |
| Q4B9 | C-5 |
| Q4C0 | D-7 |
| Q4C1 | D-7 |
| Q501 | D-2 |
| Q502 | D-3 |
| Q507 | C-3 |
| Q5A0 | B-8 |
| Q5A1 | A-7 |
| Q5A2 | A-7 |
| Q5A3 | B-5 |
| Q5A4 | C-5 |
| Q5A5 | A-7 |
| Q5A6 | A-8 |
| Q5A7 | B-3 |
| Q5A8 | B-4 |
| Q5A9 | B-4 |
| Q5B0 | B-5 |
| Q5B1 | B-4 |
| Q5B2 | B-4 |
| Q5B3 | B-4 |
| Q5B4 | B-8 |
| Q5B6 | D-8 |
| Q5B7 | D-8 |
| Q5B8 | D-8 |
| Q5B9 | D-8 |
| Q5C0 | B-7 |
| Q5C1 | B-7 |
| Q5C2 | B-3 |
| Q5C3 | C-7 |
| Q5C4 | C-5 |

| SYMBOL NO. | ADDRESS |
|---|---|
| Q5C5 | C-2 |
| Q5C6 | B-2 |
| Q5C7 | B-2 |
| Q5C8 | C-7 |
| Q5C9 | B-8 |
| Q5D0 | C-7 |
| Q5D1 | C-5 |
| Q5D2 | C-8 |
| Q5D3 | C-4 |
| Q5D4 | D-4 |
| Q5D5 | B-3 |
| Q5D6 | D-4 |
| Q5D7 | D-4 |
| Q5D8 | C-4 |
| Q5D9 | A-5 |
| Q5E1 | C-2 |
| Q5E2 | C-3 |
| Q5E3 | D-7 |
| Q5E4 | A-6 |
| Q5E5 | C-2 |
| Q5E9 | C-2 |
| Q5F0 | C-2 |
| Q5F1 | D-1 |
| Q5F2 | C-7 |
| Q5F3 | B-3 |
| Q5F4 | C-2 |
| Q5F5 | D-1 |
| Q5G0 | A-2 |
| Q5G1 | A-1 |
| Q801 | D-5 |
| Q804 | D-5 |
| | |
| | |
| TP4A | D-5 |
| | |
| | |
| VC501 | D-3 |
| | |
| | |
| VR4A0 | D-7 |
| VR5A0 | C-1 |
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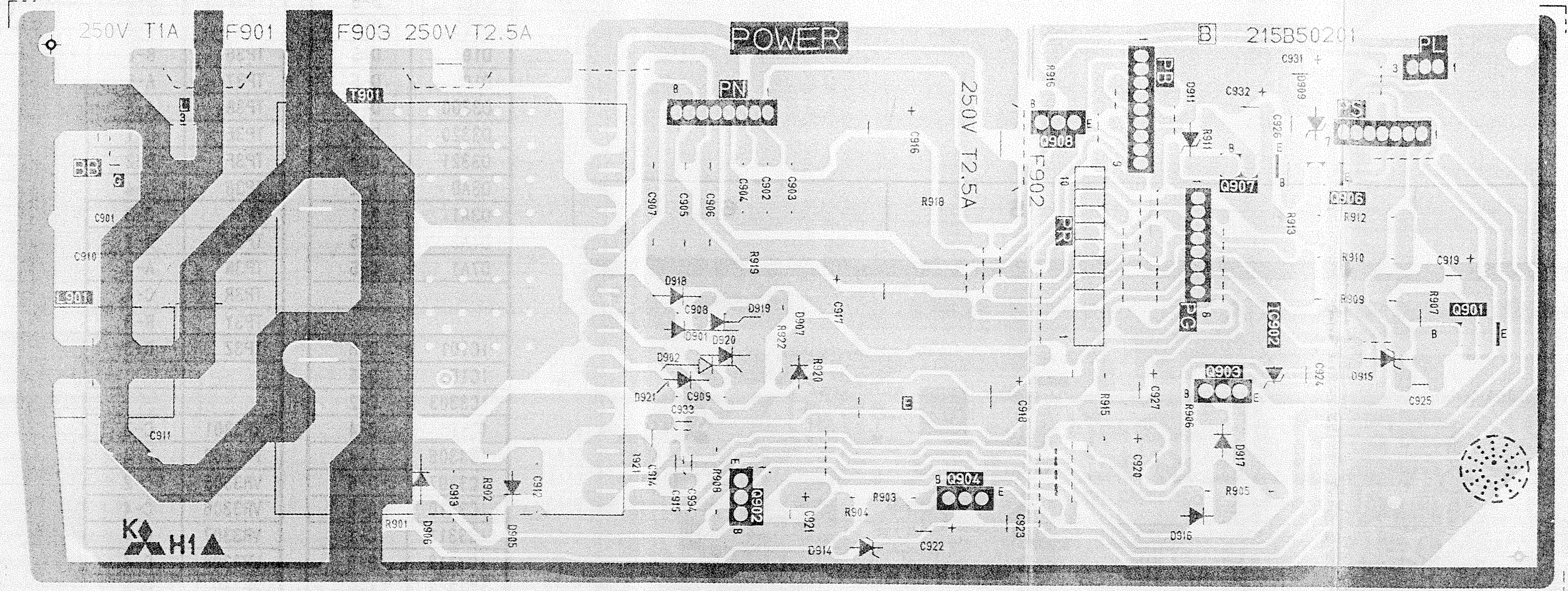
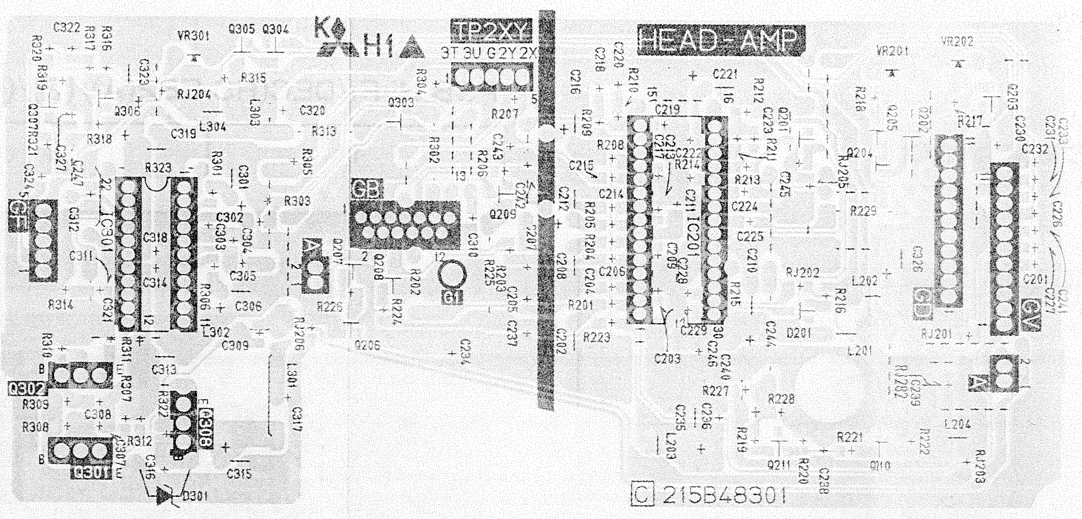
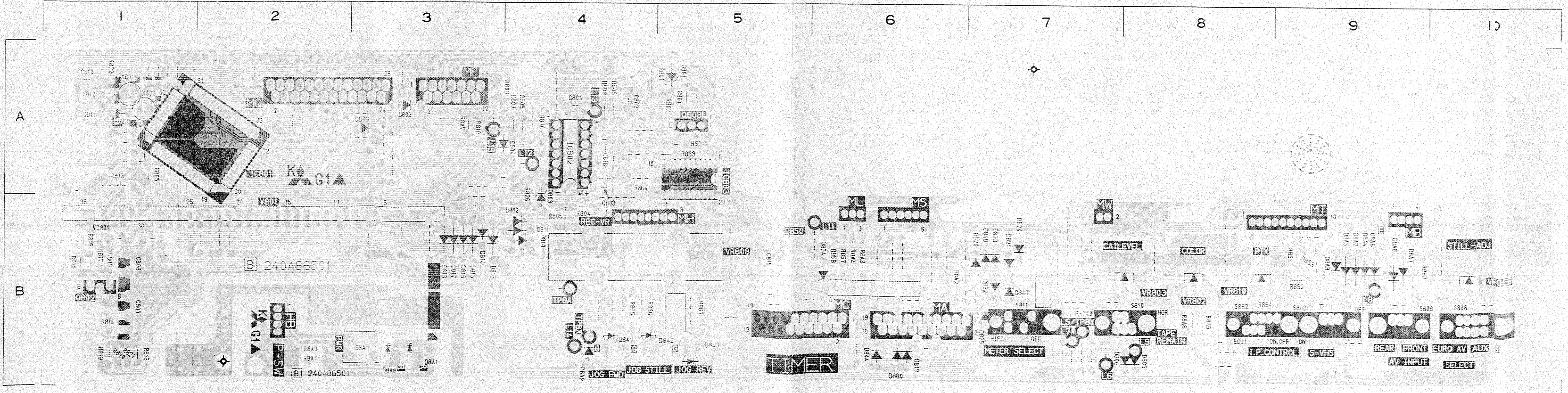
PCB-POWER


250V T1A
F901
F903 250V T2.5A
T901
POWER
215B50201
PN
PB
PL
PS
250V T2.5A
F902
PR
PC
Q908
Q907
Q906
Q901
Q903
Q902
Q904
K H1

PCB-HEAD-AMP


TP2XY
3T 3U G 2Y 2X
HEAD-AMP
IC301
IC201
GB
Q307
Q301
Q308
215B48301
K H1

PCB-TIMER


1
2
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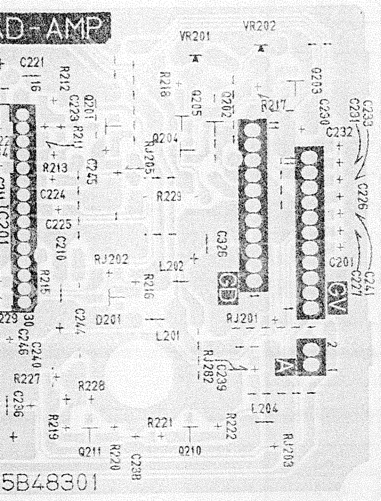
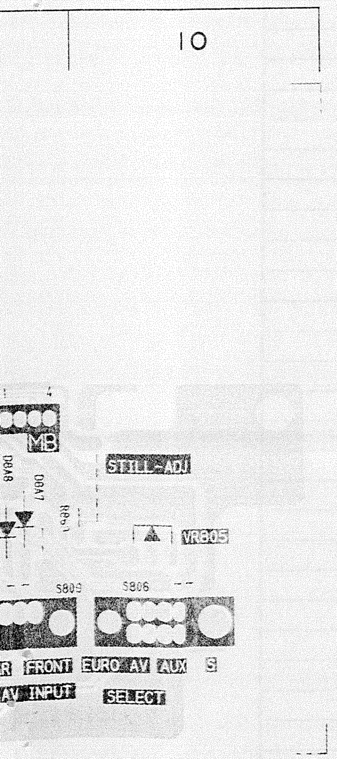
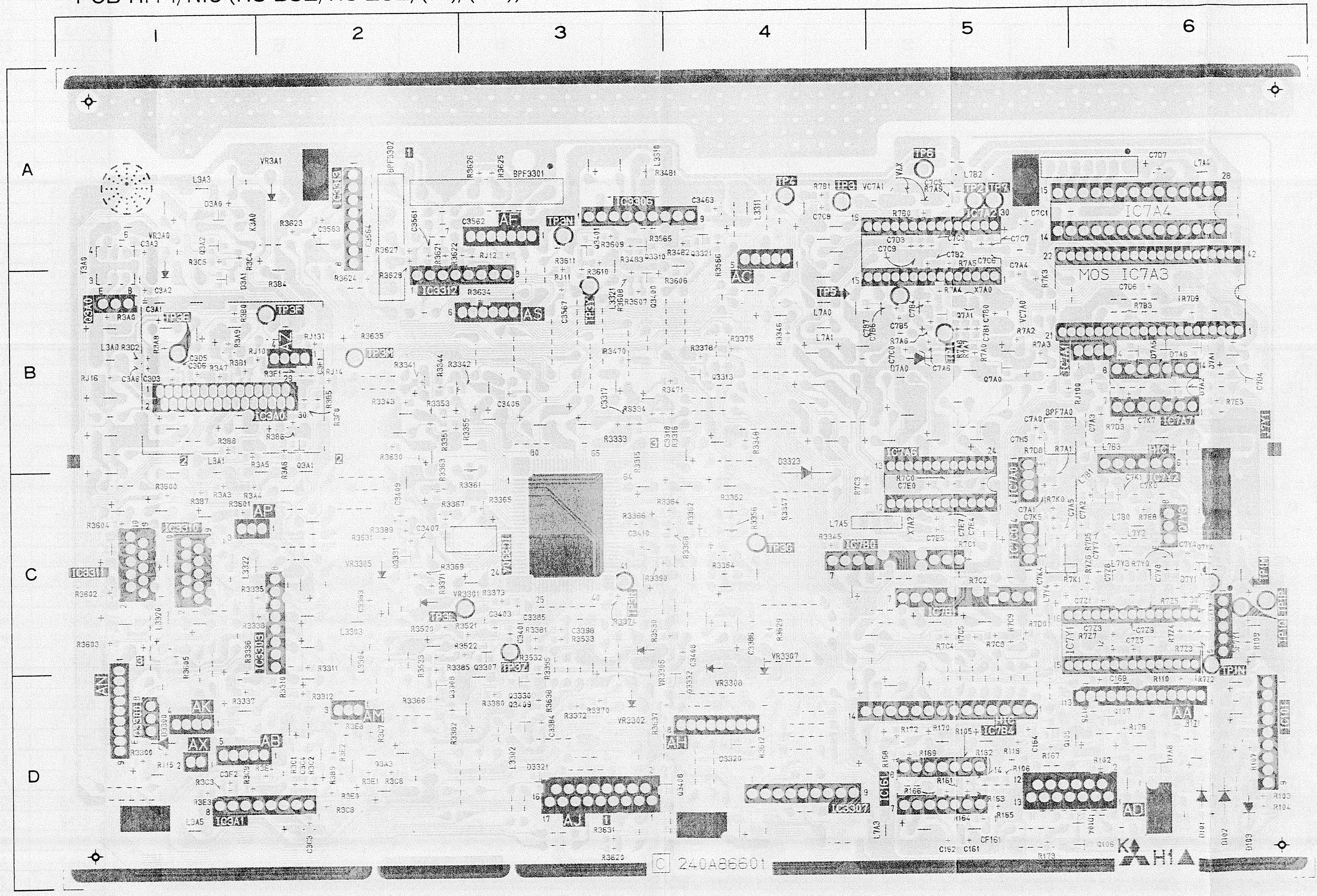
6
7
8
9
10
A
B
MO
MF
IC801
IC802
IC803
K G1
V801
MH
REC-VR
ML
MS
MW
MT
MB
VR806
240A86501
Q802
P-SW
MC
MA
TIMER
CAT.LEVEL
COLOR
PIX
STILL-ADJ
VR803
VR802
VR810
METER SELECT
TAPE REMAIN
I.P. CONTROL
S-VHS
REAR
FRONT
EURO AV
AUX
AV INPUT
SELECT
JOG FWD
JOG STILL
JOG REV
240A86501


AD-AMP
5B48301


10
MB
STILL-ADJ
VR805
FRONT
EURO AV
AUX
S
AV INPUT
SELECT

## PCB Hi-Fi/NIC (HS-B82/HS-E82/(IR)/(NZ))


1
2
3
4
5
6
A
B
C
D
IC7A4
MOS IC7A3
240A86601
H1

| SYMBOL NO. | ADDRESS |
|---|---|
| D101 | D-6 |
| D102 | D-6 |
| D103 | D-6 |
| D104 | D-6 |
| D106 | D-6 |
| D3300 | D-1 |
| D3320 | D-4 |
| D3321 | D-3 |
| D3323 | B-4 |
| D3A0 | A-1 |
| D3A1 | B-1 |
| D7A0 | B-5 |
| D7A1 | B-6 |
| D7A2 | B-6 |
| D7A5 | B-6 |
| D7A6 | B-6 |
| D7A8 | D-6 |
| D7Y1 | C-6 |
| | |
| | |
| IC101 | D-6 |
| IC161 | D-5 |
| IC3303 | C-1 |
| IC3304 | C-3 |
| IC3306 | A-3 |
| IC3307 | D-4 |
| IC3310 | C-1 |
| IC3311 | C-1 |
| IC3312 | B-2 |
| IC3313 | A-2 |
| IC3A0 | B-2 |
| IC3A1 | D-1 |
| IC7A0 | C-5 |
| IC7A1 | B-5 |
| IC7A2 | A-5 |
| IC7A3 | B-6 |
| IC7A4 | A-6 |
| IC7A6 | B-5 |
| IC7A7 | B-6 |
| IC7B0 | C-4 |
| IC7B1 | C-5 |
| IC7B4 | D-5 |
| IC7C0 | C-5 |
| IC7Y1 | C-5 |
| IC7Y2 | C-6 |
| | |
| | |
| Q105 | D-5 |
| Q107 | D-6 |
| Q3300 | D-1 |
| Q3307 | C-3 |
| Q3308 | D-2 |
| Q3310 | A-3 |
| Q3313 | B-4 |
| Q3321 | A-4 |
| Q3330 | D-3 |
| Q3331 | C-2 |
| Q3332 | D-4 |
| Q3400 | B-3 |
| Q3401 | A-3 |

| SYMBOL NO. | ADDRESS |
|---|---|
| Q3408 | D-4 |
| Q3409 | D-3 |
| Q3A0 | B-1 |
| Q3A1 | B-2 |
| Q3A2 | A-1 |
| Q3A3 | D-2 |
| Q7A0 | B-5 |
| Q7A1 | B-5 |
| Q7Y3 | C-6 |
| Q7Y4 | C-6 |
| | |
| | |
| TP1 | B-5 |
| TP2 | A-5 |
| TP3 | A-4 |
| TP4 | A-4 |
| TP5 | B-4 |
| TP6 | A-5 |
| TP7 | A-5 |
| TP1M | C-6 |
| TP1N | D-6 |
| TP1P | C-6 |
| TP1Q | C-6 |
| TP3E | B-1 |
| TP3F | B-2 |
| TP3G | C-4 |
| TP3L | C-2 |
| TP3M | B-2 |
| TP3N | A-3 |
| TP3R | C-3 |
| TP3Y | B-3 |
| TP3Z | C-3 |
| | |
| | |
| VC7A0 | B-5 |
| VC7A1 | A-5 |
| | |
| | |
| VR3301 | C-2 |
| VR3302 | D-3 |
| VR3305 | C-2 |
| VR3306 | D-3 |
| VR3307 | C-4 |
| VR3308 | D-4 |
| VR3A0 | A-1 |
| VR3A1 | A-2 |
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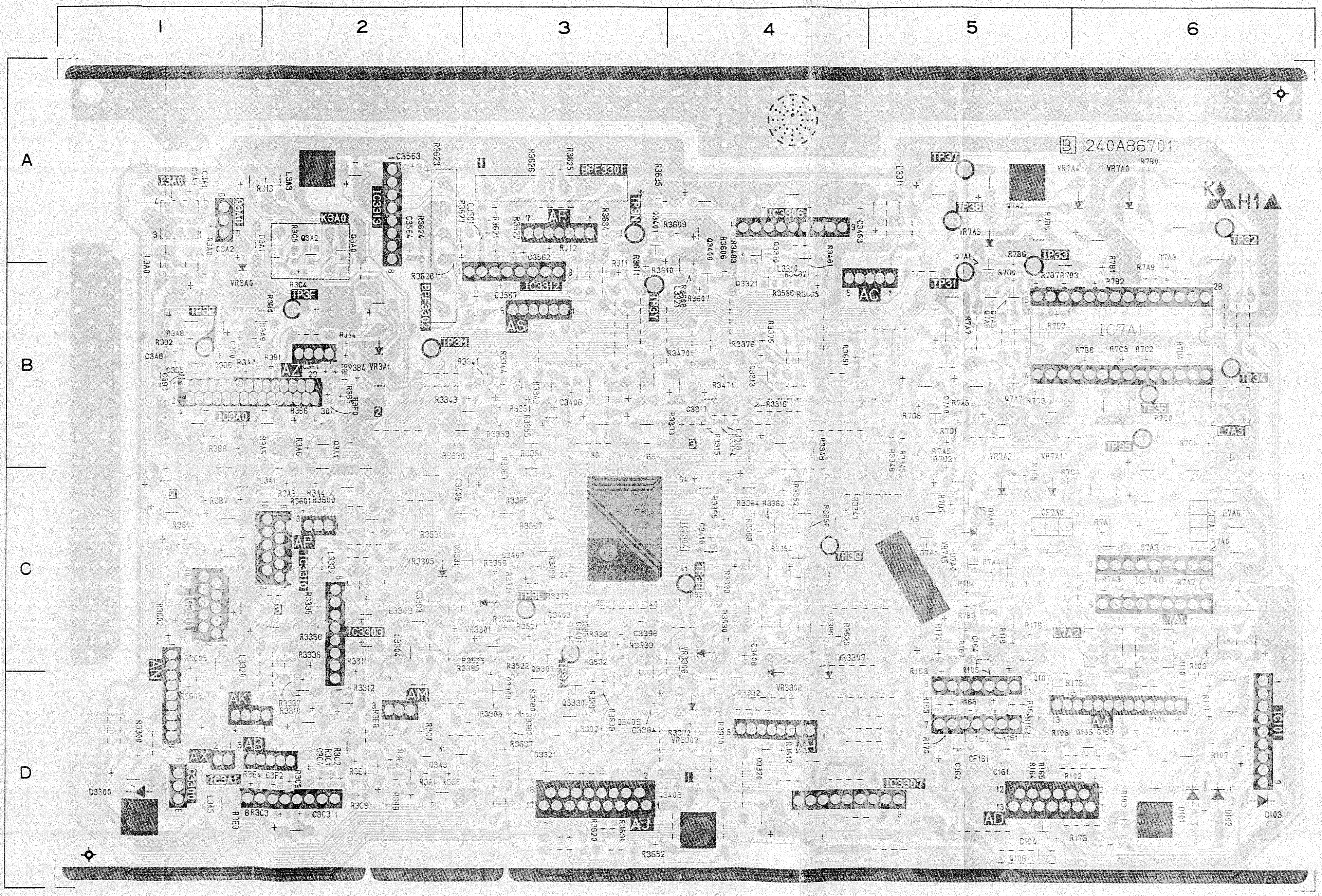
## PCB Hi-Fi/DEC(HS-E82(A)/(G)/(Y))


1
2
3
4
5
6
A
B
C
D
B 240A86701
IC7A1
IC7A0
IC3306
IC3312
IC3313
IC3303
IC3307
IC3A0
BPF3301
BPF3302
TP37
TP38
TP33
TP32
TP31
TP34
TP36
TP35
TP3E
TP3F
TP3M
TP3N
TP3G
AA
AB
AC
AD
AE
AF
AJ
AK
AM
AN
AP
AS
AX
AZ
K3A0
CN101
H1

| SYMBOL NO. | ADDRESS |
|---|---|
| D101 | D-6 |
| D102 | D-6 |
| D103 | D-6 |
| D104 | D-5 |
| D106 | D-5 |
| D3300 | D-1 |
| D3320 | D-4 |
| D3321 | D-3 |
| D3A0 | A-2 |
| D3A1 | A-1 |
| D7A0 | C-5 |
| D7A1 | C-5 |
| | |
| | |
| IC101 | D-6 |
| IC161 | D-5 |
| IC3303 | C-2 |
| IC3304 | C-4 |
| IC3306 | A-4 |
| IC3307 | D-5 |
| IC3310 | C-2 |
| IC3311 | C-1 |
| IC3312 | B-3 |
| IC3313 | A-2 |
| IC3A0 | B-1 |
| IC3A1 | D-1 |
| IC7A0 | C-6 |
| IC7A1 | B-6 |
| | |
| | |
| Q105 | D-6 |
| Q107 | D-5 |
| Q3300 | D-1 |
| Q3307 | C-3 |
| Q3308 | D-3 |
| Q3310 | A-4 |
| Q3313 | B-4 |
| Q3321 | B-4 |
| Q3330 | D-3 |
| Q3331 | C-2 |
| Q3332 | D-4 |
| Q3401 | A-3 |
| Q3409 | D-3 |
| Q3A0 | A-1 |
| Q3A1 | B-2 |
| Q3A2 | A-2 |
| Q3A3 | D-2 |
| Q7A0 | B-5 |
| Q7A1 | A-5 |
| Q7A2 | A-5 |
| Q7A3 | C-5 |
| Q7A5 | B-5 |
| Q7A6 | B-5 |
| Q7A7 | B-5 |
| Q7A8 | C-5 |
| Q7A9 | C-5 |
| | |
| | |
| TP31 | B-5 |
| TP32 | A-6 |

| SYMBOL NO. | ADDRESS |
|---|---|
| TP33 | A-5 |
| TP34 | B-6 |
| TP35 | B-6 |
| TP36 | B-6 |
| TP37 | A-5 |
| TP38 | A-5 |
| TP3E | B-1 |
| TP3F | B-2 |
| TP3G | C-4 |
| TP3L | C-3 |
| TP3M | B-2 |
| TP3N | A-3 |
| TP3R | C-4 |
| TP3Y | B-3 |
| TP3Z | D-3 |
| | |
| | |
| VR3301 | C-3 |
| VR3302 | D-4 |
| VR3305 | C-2 |
| VR3306 | C-4 |
| VR3307 | C-4 |
| VR3308 | D-4 |
| VR3A0 | B-1 |
| VR3A1 | B-2 |
| VR7A0 | A-6 |
| VR7A1 | B-5 |
| VR7A2 | B-5 |
| VR7A3 | A-5 |
| VR7A4 | A-5 |
| VR7A5 | C-5 |